



National Institute for Public Health  
and the Environment  
*Ministry of Health, Welfare and Sport*

## **The diet of the Dutch**

Results of the first two years of the Dutch National  
Food Consumption Survey 2012-2016

RIVM Letter report 2016-0082  
C.T.M. van Rossum et al.





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## Colophon

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This investigation has been performed by order and for the account of Ministry of Health, Welfare and Sports within the framework of 5.4.1. Monitoring food consumption in the domain of Nutrition and Health.

This is a publication of:  
**National Institute for Public Health  
and the Environment**  
P.O. Box 1 | 3720 BA Bilthoven  
The Netherlands  
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## Publiekssamenvatting

### **Wat eet en drinkt Nederland?**

Resultaten van de eerste twee jaren van de Nederlandse voedselconsumptiepeiling 2012-2016

De afgelopen vijf jaar zijn Nederlanders minder aardappelen, vetten en oliën, alcoholische dranken, zuivel, koek en gebak en vlees gaan eten. De consumptie van niet-alcoholische dranken en kruidenmixen en sauzen is toegenomen. De hoeveelheid groente en graanproducten bleef ongeveer gelijk. Kinderen zijn 20 procent meer fruit gaan eten ten opzichte van vijf jaar geleden. Dit zijn de bevindingen van de eerste twee onderzoeksjaren van de nieuwe voedselconsumptiepeiling van 2012-2016.

### **Wat eten we en hoeveel?**

Brood en vlees zijn populair: dit eten we 6 á 7 dagen per week. Vis en peulvruchten worden minder vaak gegeten (1 dag per week of minder). De samenstelling van het voedingsmiddelenpakket verschilt nauwelijks per leeftijd. Uitzondering hierop is dat kinderen relatief meer zuivel en fruit eten en volwassenen meer drinken (zowel alcoholische als non-alcoholische dranken). In totaal consumeert een Nederlander gemiddeld ruim 3 kg per dag aan eten en drinken. Bijna 2 kg hiervan is in de vorm van dranken (thee, koffie, water, frisdranken, alcohol en andere dranken).

### **Waar eten we?**

Nederlanders eten vooral thuis (80 procent). Voedingsmiddelen die vaker buitenshuis worden gegeten zijn koek en gebak, fruit en vis. Alcoholische dranken en vis worden relatief vaak in restaurants gebruikt. Adolescenten en volwassenen eten relatief meer op school of op het werk (respectievelijk 15 en 19 procent), ouderen juist meer thuis (85 procent).

### **Tussentijds rapport**

Het RIVM onderzoekt de consumptie in Nederland van 1- tot 79-jarigen in de periode 2012-2016. Dit rapport geeft de resultaten voor de periode 2012-2014 voor de soorten voedingsmiddelen die worden gegeten en gedronken, hoeveel, waar en wanneer. En of de voedselconsumptie is veranderd vergeleken met 5 jaar eerder. Dit zijn de tussenresultaten op basis van gegevens van ruim tweeduizend kinderen en volwassenen. De eindresultaten over de volledige onderzoeksperiode worden en de betekenis voor de gezondheid worden in 2018 verwacht.

Kernwoorden: voedselconsumptiepeiling, voedingsmiddelen, kinderen, volwassenen, trend, GloboDiet



## Synopsis

### **The diet of the Dutch**

Results of the first two years of the Dutch National Food Consumption Survey 2012-2016

During the last five years, the consumption of potatoes, fats and oils, alcoholic beverages, dairy products, cakes and biscuits and meat (products) decreased. Use of non-alcoholic drinks and condiments and sauces rose. Consumption of vegetables and cereals and bread remained stable. Children and adolescents consumed 20% more fruit than about 5 years ago. These are initial findings halfway through the data collection of the food consumption survey 2012-2016 for 1 to 79 year-olds.

### **What do we eat and how much?**

Cereal products (especially bread) and meat are popular: they are consumed almost daily. Fish and legumes are consumed less (one day a week or less). The composition of the food package differs little between the groups. Exception is that children consume relatively more milk and fruit than adults and they drink less beverages. In total, a Dutch person consumes each day on average more than 3 kg of foods and drinks. Almost 2 kg of this concerns tea, coffee, water, soft drinks, juices and alcohol.

### **Where do we eat?**

The Dutch consume most of the foods and drinks at home (80%). Foods that are often eaten outdoors are cakes and biscuits, fruit and fish. Alcoholic beverages and fish are often consumed in restaurants. Adolescents and adults consume relatively more food and drinks at school or at work (15 and 19 percent), older adults mostly at home (85 percent).

### **Interim report**

RIVM investigates the food consumption in the Netherlands of 1 to 79 year-olds in the period 2012-2016. This report provides the results for the period 2012-2014. For this period is mapped what more than two thousand children and adults consume, and when and where they eat. In addition, the changes since the previous survey five years ago are investigated. The results for the entire period and the significance for health issues will be published after finalization of the four years of data collection (expected 2018).

Keywords: food consumption survey, foods, children, adults, trend, GloboDiet





## Contents

### List of Abbreviations — 9

## 1 Introduction — 11

- 1.1 Monitoring food consumption — 11
- 1.2 DNFCs-core survey 2012-2016 — 11
- 1.3 Interim report DNFCs 2012-2014 — 12

## 2 Methods — 13

- 2.1 Study population and recruitment — 13
- 2.2 Data collection and data handling — 14
  - 2.2.1 Overview of data collection — 14
  - 2.2.2 Panel characteristics — 15
  - 2.2.3 Questionnaire — 16
  - 2.2.4 Height, body weight, upper arm and waist circumferences — 18
  - 2.2.5 24-hour dietary recall — 18
  - 2.2.6 Quality assurance — 19
- 2.3 Data analyses and evaluation — 20
  - 2.3.1 Dutch references population — 20
  - 2.3.2 Characteristics of study population and some dietary habits — 20
  - 2.3.3 Food consumption — 20
  - 2.3.4 Food consumption by place and occasion — 21
  - 2.3.5 Comparison of food consumption with previous survey — 21

## 3 Study population — 23

- 3.1 Introduction — 23
- 3.2 Response — 23
- 3.3 Representativeness of the study population — 25
  - 3.3.1 Distribution across day of the week and season — 25
  - 3.3.2 Socio-demographic characteristics — 26
  - 3.3.3 Lifestyle characteristics — 28
  - 3.3.4 Conclusion 35

## 4 General dietary characteristics — 37

- 4.1 Introduction — 37
- 4.2 Food patterns — 37
- 4.3 Diet or eating habit — 40
- 4.4 Discretionary salt use — 40
- 4.5 Dietary supplements — 42

## 5 Foods and drinks — 45

- 5.1 Introduction — 45
- 5.2 Food groups — 45
  - 5.2.1 Consumed quantities — 45
  - 5.2.2 Consumption days — 58
- 5.3 Consumption by moments and by place of consumption — 61
  - 5.3.1 Consumption moments — 61
  - 5.3.2 Place of consumption — 63
- 5.4 Comparison with previous survey — 66

## 6 Discussion — 71

6.1	Introduction — 71
6.2	Main findings — 71
6.3	Methodological aspects — 72
6.3.1	Response and representativeness — 72
6.3.2	Method of dietary assessment — 73
6.4	Interim report — 74
6.5	Conclusions — 74

**References — 77**

**Acknowledgement — 79**

**Appendix A List of experts — 81**

**Appendix B Tables — 83**

## List of Abbreviations

BMI	Body Mass Index
CBS	Statistics Netherlands (Centraal Bureau voor de Statistiek)
DNFCS	Dutch National Food Consumption Survey
DRI	Dietary Reference Intake
EFSA	European Food Safety Authority
EPIC	European Prospective Investigation into Cancer and nutrition
GR	Health Council of the Netherlands (GezondheidsRaad)
IARC	International Agency for Research on Cancer
NNGB	The Dutch Standard for Healthy Exercise (Nederlandse Norm Gezond Bewegen)
PAL	Physical Activity Level
RDA	Recommended Dietary Allowance
SPADE	Statistical Program to Assess Dietary Exposure
SQUASH	Short QuesTionnaire to ASsess Health enhancing physical activity
TNS Nipo	Dutch market research agency

GloboDiet foodgroups are in the text indicated with the following shorter term:

Potatoes	01. Potatoes and other tubers
Vegetables	02. Vegetables
Legumes	03. Legumes
Fruits, nuts, olives	04. Fruits, nuts and seeds, olives
Dairy (products)	05. Dairy products and substitutes
Cereal (products)	06. Cereals and cereal products
Meat (products)	07. Meat, meat products and substitutes
Fish and shellfish	08. Fish, shellfish and amphibians
Egg (products)	09. Eggs and egg products
Fats and oils	10. Fats and oils
Sugar and confectionery	11. Sugar and confectionery
Cakes and sweet biscuits	12. Cakes and sweet biscuits
Non-alcoholic beverages	13. Non-alcoholic beverages
Alcoholic beverages	14. Alcoholic beverages
Condiments and sauces	15. Condiments, spices, sauces and yeast
Stocks	16. Soups and stocks
Miscellaneous	17. Miscellaneous
Savoury snacks	18. Savoury snacks
Ready meals	19. Ready meals



# 1 Introduction

## 1.1 Monitoring food consumption

The aim of the Dutch policy on health and diet is to facilitate a healthy lifestyle in society.<sup>1</sup> A balanced diet in the population contributes to the prevention of morbidity from conditions such as cardiovascular diseases, diabetes type 2 and obesity. A healthy diet includes safe foods with no adverse effects on health due to the presence of micro-organisms, residues and contaminants.

Monitoring food consumption forms the basis of nutrition and food policy.<sup>1</sup> Food consumption surveys provide insight into a population's consumption of foods and the intake of macro and micronutrients, into intake risks of potentially harmful chemical substances, into environmental aspects of the diet and into dietary trends. To effectively formulate and evaluate health, nutrition, food safety, and food environmental policy, data from food consumption surveys are needed, together with data on the composition of foods and information on nutritional status.<sup>3</sup> Furthermore, consumption surveys provide information that is useful for nutrition education programmes, scientific research in the field of nutrition and health, and the stimulation of healthier food development.

Data on food consumption and nutritional status of the general Dutch population and of specific groups in that population have been collected periodically since 1987 in the Dutch National Food Consumption Surveys (DNFCSs). Since 1998, the method and design of the dietary monitoring system have been revised several times.<sup>2, 3</sup> The results gathered since 2003 are comparable. The current dietary monitoring system consists of three modules:

- Module 1 is the core food consumption survey among the general population. In this module the method is in accordance with the European guidance of the EFSA for dietary exposure assessment in Europe.<sup>4</sup>
- Module 2 focuses on the nutritional status of the general population in relation to food consumption by measuring specific vitamins and minerals in blood and urine.
- Module 3 includes additional research on specific topics. Depending on the policy needs, specific dietary issues can be studied. Examples of this are monitoring of dietary habits or biomarkers in specific groups such as infants or pregnant women and the monitoring of consumption of specific foods such as energy drinks.

## 1.2 DNFCs-core survey 2012-2016

During four years from November 2012 until December 2016, food consumption data among the general population is collected in the DNFCs 2012-2016. This survey covers children and adults aged 1 to 79 years, living in the Netherlands. This survey is part of module 1 of the Dutch food monitoring system.

The main aim of DNFCs 2012-2016 is to gain insight into the diet of children and adults aged 1 to 79 years living in the Netherlands and to establish:

- the consumption of food groups, including fruits, vegetables and fish and the percentage of children and adults that meet the most recent dietary guidelines in the Netherlands for these foods;
- the intake of energy and nutrients from foods and drinks and the percentage of children, and adults that meet the recommendations on energy and nutrients;
- the use of dietary supplements and the intake of micronutrients from foods and drinks and from dietary supplements separately and combined;
- the place and moment of consumption of foods and drinks, energy and nutrients;
- the diet by subgroups of the population, for instance subgroups based on socio-demographic factors;
- the trends in food consumption.

In addition, the dataset DNFCs 2012-2016 will be suitable for research questions on food safety, food environmental aspects as well as for public health programmes and scientific nutritional research, national and international.

DNFCs 2012-2016 is authorised by the Dutch Ministry of Health, Welfare and Sport (VWS) and coordinated by the Dutch National Institute for Public Health and the Environment (RIVM). Part of the work is subcontracted to other organisations:

- Data is being collected by the market research agency TNS NIPO (Amsterdam, the Netherlands).
- Software for 24-hour dietary protocols (GloboDiet<sup>®</sup>, former EPIC-soft<sup>®</sup>) is provided by the International Agency for Research on Cancer (IARC, Lyon, France).

An Expert Committee (see Appendix A) is advising the VWS ministry on the survey during planning, data collection, data analyses and reporting of the results.

### **1.3 Interim report DNFCs 2012-2014**

The present report presents initial results of food group consumption over the first two years of data collection (November 2012 to December 2014). This report describes survey methods (Chapter 2), response data and characteristics of the participants (Chapter 3), characteristics of the diet (Chapter 4) and the consumption of food groups and subgroups, per day and by place and by food consumption moment. Furthermore, this report gives insight in the changes in the consumption since the previous food consumption survey in 2007-2010 (Chapter 5). A comparison of the food consumption with the current food based dietary guidelines is expected to be published early 2017.

The main report based on four years of data collection is expected in 2018. In that report, also more detailed data on consumption for different subgroups of the population and on the intake and evaluation of the energy and nutrient intake will be published.

## 2 Methods

### 2.1 Study population and recruitment

The target population consisted of people living in the Netherlands and aged 1 to 79 years; pregnant and lactating women were not included. Also excluded were institutionalised people because of their reduced freedom in food choice. Respondents were drawn from representative consumer panels from TNS NIPO. Several characteristics of the panel members, such as socio-demographic factors, were known to TNS NIPO. People in these panels participate in all types of surveys and were not specifically selected on dietary characteristics. The study participants had not been involved in any other type of food consumption survey during the previous four years. Only one person per household was allowed to participate. In addition, the panels only included people with adequate command of the Dutch language.

The overall data collection of DNFCS Core Survey 2012-2016 will cover four years (target n=4,340). This interim report presents preliminary results over the first two years of data collection. That data, reported here, were collected from November 2012 to December 2014. Per period of four weeks, age and gender stratified samples (16 subgroups) were drawn. These age and gender groups were in line with those used by the Health Council in the dietary references intakes.

The survey population was intended to be representative within each age category with regard to age and gender, region, degree of urbanisation and educational level (or the educational level of the parents/caretakers for children up to 18 years when living with their parents/caretakers). Therefore, during recruitment, the study population was monitored on these characteristics and, if necessary, the sampling was adjusted on these factors.

During the first two years of data collection, 3,703 persons aged 1 to 79 years were invited to participate in the study, of which 2,237 agreed and completed the data collection in December 2014. More information about the response is presented in section 3.1. Persons who completed and returned all materials, received an incentive bonus (NIPOints to be exchanged for a gift card or coupon). For children up to 9 years-old both the parent/caretaker and the child received an incentive; the parents/caretaker received NIPOints, the child received a present. In the current report, the age and gender categories were aggregated to eight subgroups:

- 1 to 3 year-old boys and girls
- 4 to 8 year-old boys and girls
- 9 to 18 year-old boys
- 9 to 18 year-old girls
- 19 to 50 year-old men
- 19 to 50 year-old women
- 51 to 79 year-old men
- 51 to 79 year-old women

## 2.2 Data collection and data handling

### 2.2.1 *Overview of data collection*

The study was conducted according to the guidelines of the Helsinki Declaration<sup>5</sup> and complying with the Dutch law on Medical Research involving human subjects. The market research agency invited selected people to participate in the study approaching them with an invitation letter, an information leaflet and a reply card. Persons with e-mail contacts received, shortly after the postal information, an e-mail with a web link to the digital version of the reply card. Those who agreed to participate were sent a questionnaire, whenever possible a digital version.

The dietary assessment was based on two non-consecutive 24-hour dietary recalls (See Figure 2.1). The logistics differed by age group.

- Parents/caretakers of children aged 1 to 8 years, were invited to complete a food diary of their child on two specific days, also covering the consumption at day-care, school or elsewhere. Instructions were given by telephone by the interviewers. The day after the first registration of consumption in the food diary, a face-to-face interview with the parent/caretaker was carried out during a home visit, children aged 4 to 8 years were present during the interview. During this visit, both height and weight were measured (see section 2.2.4). The second interview for the 24-hour dietary recall was conducted by telephone.
- For children aged 9 to 15 years, the two 24-hour recalls were carried out by means of two face-to-face interviews during home visits. Contact with children aged 9 to 15 years was made initially through a parent or caretaker; the interviews were conducted with the child in presence of the parent or caretaker. During the first visit, both height and weight were measured (see section 2.2.4).
- Participants aged 16 to 69 years were interviewed twice by telephone, unannounced. Height and weight were self-reported by the respondent.
- Participants aged 70 to 79 years were asked to fill in a food diary on two specified days, prior to the interview days. Instructions were given by telephone. The day after the first registration of consumption in the food diary a face-to-face interview was carried out during a home visit. The completed diary was used as a memory aid. During the home visit both weight, arm circumference and waist circumference were measured. No height was measured for practical reasons, because not all respondents were able to stand right up and due to the difficulties in the assessment and evaluation in BMI in this age category (see section 2.2.4). If possible, the second 24-hour dietary recall interview was conducted by telephone. If a telephone interview appeared to be too difficult, a second home visit was arranged.



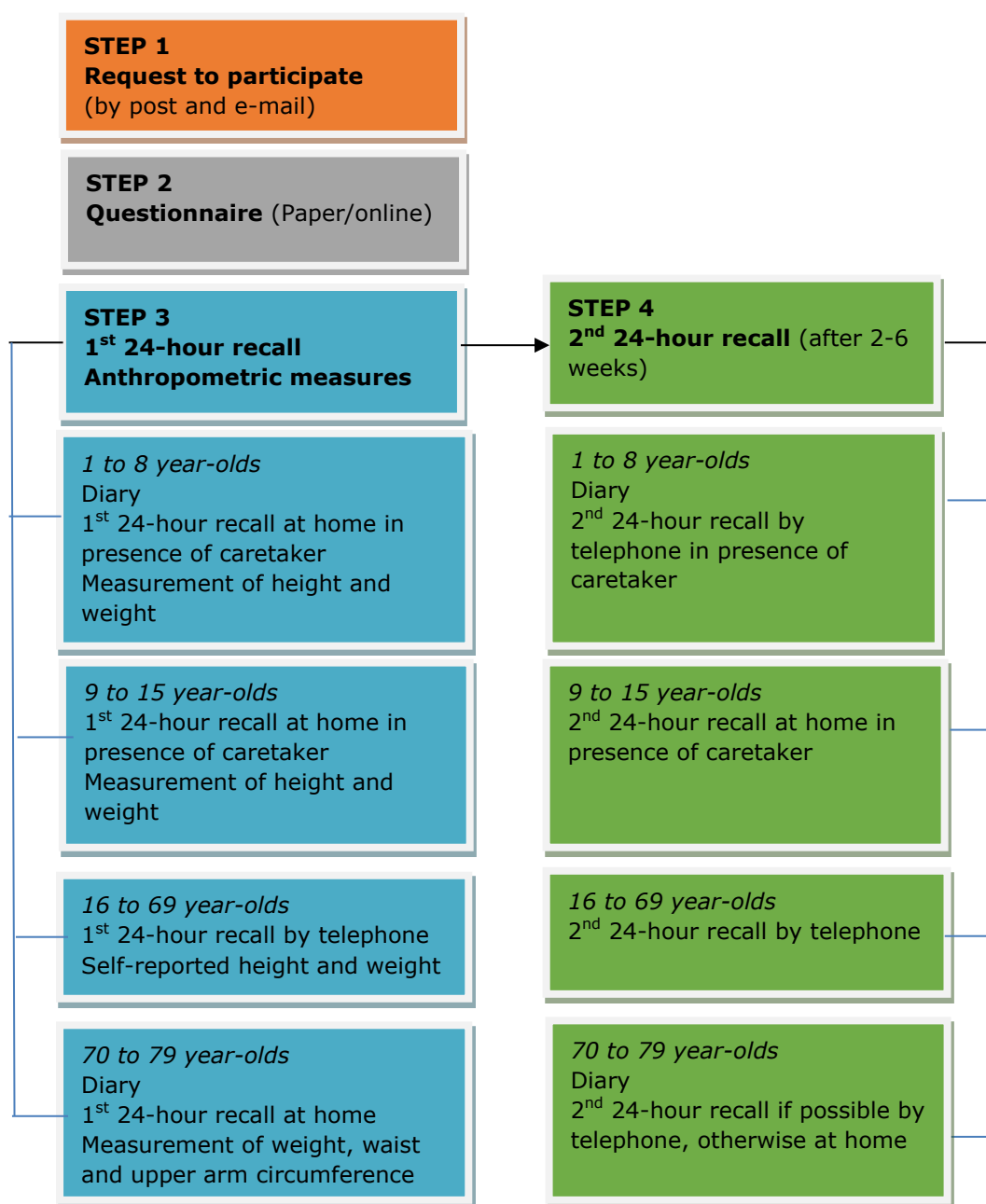


Figure 2.1 Overview of data collection.

### 2.2.2

#### *Panel characteristics*

The market research agency provided household background information (panel characteristics) on the place of residence by urbanisation level, region and numerical part of the postal code. The *region* was based on Nielsen CBS division, in northern, eastern, southern and western region; the latter region was subdivided into the three largest cities (Amsterdam, Rotterdam, and The Hague) including their suburbs and the rest of the western region. The *degree of urbanisation* was divided in extremely urbanised (2500 or more addresses/km<sup>2</sup>), strongly (1500-2500 addresses/km<sup>2</sup>), moderately (1000-1500 addresses/km<sup>2</sup>), hardly (500-1000 area addresses/km<sup>2</sup>) and not urbanised (fewer than 500 addresses/km<sup>2</sup>). The *educational*

*level* concerned the highest educational level of the participants or, in case of participants under the age of 19, of the head of household. Educational level was categorised into low (primary education, lower vocational education, advanced elementary education), middle (intermediate vocational education, higher secondary education) and high (higher vocational education and university). The information on these factors was also used during recruitment to strive to the best achievable representativeness.

### 2.2.3 Questionnaire

The participants – or their parents/caretakers in case of young children – completed a questionnaire either on paper or online via the TNS NIPO website. The questions covered various background factors, such as educational level, working status, native country, family composition various life style factors, such as patterns of physical activity, smoking, use of alcoholic beverages and various general characteristics of the diet, such as breakfast use, food frequency of fruit, vegetables, fish, and dietary supplements and the use of salt during preparation of food or at the table.

Five different age specific questionnaires were used, taking into account the way of life (school, work) of the different age groups: one for 1 to 3 year-olds, one for 4 to 11 year-olds, one for 12 to 18 year-olds, one for 19 to 70 year-olds and one for 71 to 79 year-olds. A small number of people completed the questionnaire for a different age category than they finally belonged to in the study; the age categories used in this report were based on the participant's age at the first date of interview – the questionnaires had been sent prior to the interviews. Copies of the questionnaires (in Dutch) can be downloaded from the DNFC website.<sup>6</sup>

Data from the questionnaires were checked for unrealistic values, inconsistencies and missing values following an internal protocol. If possible, values were checked with the participant or market research organisation and updated.

With regard to the educational level, working status and native country, the information from the questionnaire was combined and/or aggregated into fewer categories. The *highest educational level* of the respondent or, in case of children living with parents or caretakers, the highest educational level of the caretakers was defined. According to the panel characteristics, three categories were distinguished: low, middle and high (see section 2.2.2). *Working status* was aggregated into Employed (paid work or self-employed) or Unemployed. For children living with parents or caretakers, information on both caretakers was used and combined into two categories; All carers (1 or 2) are working or At least one carer is not working. There was also a category for incomplete information. For *ethnicity* a distinction was made between Dutch, Non-western immigrant and Western immigrant (Europe, United States, Australia), for both children and adults, based on the native country of the parents (CBS).<sup>7</sup>

For adults (19 to 79 year-olds) the information on *physical activity* was obtained according to the Squash (Short QQuestionnaire to ASsess Health enhancing physical activity) questionnaire.<sup>8</sup> Questions on physical

activity included activities at work/school, household activities and activities during leisure time. Respondents were asked to state per activity how many days they performed the activity, how many hours per day and what the intensity of the activity was. In the questionnaire of the 71 to 79 year-olds the questions on activities during work were left out. Based on the information in the questionnaires, times spent on physical activities was combined (based on the Lifestyle Monitor) and evaluated using the guideline on Dutch Standard for Healthy Exercise (NNGB) and the fitness standard.<sup>9</sup> For the NNGB, adults should have at least 30 minutes of moderate intensive physical activity ( $\geq 4$  MET), for at least five days a week. For those aged 55 years or above, the intensity of the physical activity may be lower ( $\geq 3$  MET). To meet the fitness standard, adults should have at least 20 minutes of heavy intensive activity at least three times a week.

For the youngest age categories (1 to 18 year-olds), the questionnaires in the Dutch Public Health monitor were used.<sup>10</sup> In those questionnaires, questions on activities more relevant for these age categories were included. For example, questions referring to watching television, computer time, sports at school, walking or cycling to school, sport club activities and playing outdoors. Based on this information different categories were used to describe physical activity: for 1 to 18 year-olds: Inactive ( $< 3$  hours/week); Semi inactive (3 to 5 hours/week), Semi active (5 to 7 hours/week) and Norm-active ( $> 7$  hours/week).<sup>11, 12</sup>

Other information on lifestyle characteristics concerned smoking and alcohol. Information on these topics together with anthropometry were used in this report to give an indication of the study population and the representativeness, as the questions on these topics were also used in other national life style monitors. The *smoking* status was divided into three categories: Current smoking of at least one cigarette, cigar or pipe a day, Use of tobacco in the past and Never-smokers. Information on consumption of *alcoholic drinks* (from 12 year-olds on) was for this report only used to indicate a person as a user of alcoholic beverages.

*Usual eating habits* were related to the use of breakfast and dietary restrictions. Breakfast use was questioned per number of days in the week. The type of special diets (e.g. diabetes, energy restricted, cow's milk protein free, lactose restricted) and special eating habits (e.g. vegetarian, vegan, macrobiotic, anthroposophical) could be filled in.

The questions on the consumption frequency of *dietary supplements* distinguished the use of different supplements during wintertime and during the rest of the year. In this report, a respondent is assumed to be a user if he or she is using supplements during wintertime and/or during the rest of the year. For women of 50 years and above and men of 70 years and above, the frequency of all supplements containing vitamin D (vitamin D, vitamin A/D, multivitamins and multivitamin/multimineral supplements) was taken together, to define a person as an user of vitamin D containing supplements.

The question on *salt* (including table salt, herb mixes with salt, but not including salty seasonings such as soy sauce, bouillon) distinguished whether salt was added in home –prepared meals and/or at the table.

#### 2.2.4 *Height, body weight, upper arm and waist circumferences*

During the home visits of 1 to 15 year-olds, body weight and height were measured once and recorded to an accuracy of 0.1 kg and 0.1 cm respectively. Participants aged 16 to 70 years reported their self-measured height and weight during the 24-hour dietary recall interviews by telephone. Of 71 to 79 year-olds, weight, upper arm circumference and twice the waist circumference were measured during the home visits, all measurements with an accuracy of 0.1 cm. Height was not measured for this age category, given the difficulties in measuring height in older adults.

Body mass index (BMI) was determined per person as the body weight divided by the height squared ( $\text{kg/m}^2$ ). For 1 to 15 year-olds the single measurements of weight and height were used. For 16 to 70 year-olds the average body weight and height were calculated, based on the self-reported information on both interview days. Subsequently, the BMI's were classified using age and gender specific cut off values. The evaluation of body weight in BMI classes is dependent on age and gender.<sup>13</sup> Cut off points for children were lower than those for adults. BMI was not calculated for 71 to 79 year-olds due to the difficulties in the assessment and evaluation in BMI in this age group. In this age group mid-upper arm circumference was used as indicator of thinness instead of BMI. A mid-upper arm circumference  $<25$  cm was categorised as Underweight. In addition, waist circumferences were measured among this group. A waist circumference  $\geq 102$  cm (for men) or  $\geq 88$  cm (for women) might be associated with overweight (M. Visser, personal communication). However, there is no consensus on these cut off points. The questionnaire of the 71-79 year-olds consisted also the SNAQ<sup>65+</sup>.<sup>14</sup> Based on these questions and the mid-upper arm circumference these persons were classified into Undernutrition, At risk of undernutrition and No undernutrition (for more details see a previous report).<sup>15</sup>

#### 2.2.5 *24-hour dietary recall*

Two non-consecutive 24-hour dietary recalls were conducted per participant (see section 2.2.1). The 24-hour dietary recall covered the period from getting up in the morning until getting up on the following day (which was, in fact, the day of the interview). Food consumption on Sunday to Friday was recalled the next day, consumption on a Saturday was recalled the following Monday. Interview days and survey days were not planned on national and/or religious bank holidays, or when the participant was on holiday.

Each person was interviewed twice with a planned interval of about four weeks (2 to 6 weeks). In order to gain insight into the habitual food consumption, the aim was to spread the recalls equally over all days of the week and the four seasons. The home visits were announced while the interviews by telephone were conducted unannounced.

During the home visits, the completed diaries of young children and older participants were verified for the use of household measures (such as cups, mugs, glasses, and spoons) to indicate consumed amounts at home. The interviewer measured and registered the volume of the consumed content of these household measures by weighing them

empty and filled with water. This information was used during the 24-hour dietary recalls.

The 24-hour dietary recalls during the first two-year period were conducted by 23 dietitians, who were trained in using the computer directed interview programme GloboDiet (IARC®). With GloboDiet the interviews were standardized and facilitated to enter the answers directly into the computer.<sup>16</sup> The average time taken to complete the dietary recall was 43 minutes. The GloboDiet interviews comprised the following:

- a. General information on the participant including date of birth, height and body weight, special eating habits or special diets on the survey day of the 24-hour recall and special information on the day itself – such as a feast day or holiday, or any illnesses.
- b. A quick list for each food consumption moment – including the time, place and main foods and recipes consumed. For young children and older adults quick list items were entered according to the information in the food diaries.
- c. Description and quantification of foods and recipes reported in the quick list (see b). Food description consisted of a further specification of all foods consumed, using facets and descriptors such as preparation method and fat content. Portion sizes of the foods and meals could be quantified in several ways: by means of quantities as shown on photos in a provided picture booklet, or in household measures, units and standard portions, by weight and/or volume, and part of total recipe.
- d. The possibility for entering notes with further information.
- e. Intake of dietary supplements.

#### 2.2.6 *Quality assurance*

For the purpose of quality assurance of the interviewers, regular updates of information and different checks were executed. After the initial three-day training period, refresher training of the interviewers was given twice a year and a newsletter was sent about every two months. During the two-year study period, the interviewers were once asked to record an interview on tape. These tapes were evaluated by RIVM dietitians and feedback was given to the interviewers. Moreover, the interviewers performed a homework assignment three times, that was corrected by the RIVM dietitians and discussed with the interviewers.

Besides the quality checks during the interview within the Globodiet system, various quality checks were carried out on the data entered. Firstly, notes made by the interviewers during the recall were checked and handled. For example, if a special food could not be chosen in GloboDiet, a note was written, and based on additional information this new food was added to the GloboDiet databases. Secondly, several standardised quality checks were performed, such as a check on spelling errors in brand names, missing quantities and correct use of the household measures (for example, not a heaped spoon for fluid food). Furthermore, extreme consumption data per food group were checked. This check was done using a statistical method, the Grubbs' method.<sup>17</sup>

## 2.3 Data analyses and evaluation

The interim results in chapter 3, 4 and 5 are mainly described for eight age gender categories, since the dietary reference intakes differ for these groups. Statistical analyses for observed intakes were done using SAS, version 9.3.

### 2.3.1 *Dutch references population*

The results were weighted for small deviances in socio-demographic characteristics, day of the week and season of data collection, in order to give results that are representative for the Dutch population and representative for all days of the week and all seasons. Results based on the 24-hour recalls were weighted for the level of education, region and urbanisation as well as for season (based on the first interview day) and day of the week (aggregated into weekday and weekend day). For children up to 19 years, the educational level of the head of household was used in the weighting. Census data from 2014 was used as reference population to derive the survey weights.<sup>7</sup>

### 2.3.2 *Characteristics of study population and some dietary habits*

Frequency distributions and means of socio-demographic and dietary characteristics, anthropometry, supplement use, physical activity, smoking, salt use were calculated for the eight population groups.

### 2.3.3 *Food consumption*

The GloboDiet food group classification comprised 19 main groups and 86 subgroups. 15 of these subgroups were further detailed into in total 62 sub-subgroups. Altogether 147 GloboDiet food groups (main groups, subgroups and sub-subgroups) were distinguished.<sup>16</sup> For this report, the used jarred meals for young children were considered as a separate main group. Other ready meals and recipes (including soups) were classified according to the food (sub)groups of the present ingredients.

Average food consumption over two days was calculated for each participant. From this, the mean consumption per food (group) was estimated for each age gender group. As the distributions were skewed, means should be cautiously interpreted, the 5<sup>th</sup> percentile, the median and 95<sup>th</sup> percentile of consumption are given.

Additionally, the percentage of consumption days of food (groups) was also calculated, as well as the mean, the 5<sup>th</sup> percentile, median and 95<sup>th</sup> percentile on these consumption days. The percentage of consumption days and food quantities on consumption days was presented instead of the percentage of users and food quantities of users. This was chosen, because it gives a better insight into the consumption frequency as well as in the consumed amounts on these days.

GloboDiet foodgroups in the text are indicated with the following shorter term:

Potatoes	01. Potatoes and other tubers
Vegetables	02. Vegetables
Legumes	03. Legumes
Fruits, nuts, olives	04. Fruits, nuts and seeds, olives
Dairy (products)	05. Dairy products and substitutes

Cereal (products)	06. Cereals and cereal products
Meat (products )	07. Meat, meat products and substitutes
Fish and shellfish	08. Fish, shellfish and amphibians
Egg (products)	09. Eggs and egg products
Fats and oils	10. Fats and oils
Sugar and confectionery	11. Sugar and confectionery
Cakes and sweet biscuits	12. Cakes and sweet biscuits
Non-alcoholic beverages	13. Non-alcoholic beverages
Alcoholic beverages	14. Alcoholic beverages
Condiments and sauces	15. Condiments, spices, sauces and yeast
Stocks	16. Soups and stocks
Miscellaneous	17. Miscellaneous
Savoury snacks	18. Savoury snacks
Ready meals	19. Ready meals

To calculate the percentage of animal-based and plant-based foods in the diet, the following GloboDiet food groups were assumed to be animal based: 'Meat (products)', 'Fish and shellfish', 'Egg (products)', '10-02 Butter' and Dairy(products)'. Alcoholic and non-alcoholic beverages were excluded in these calculations.

#### 2.3.4 *Food consumption by place and occasion*

During the 24-hour recalls the consumption of food and drinks was recorded by place, occasion and time. The averages of the individual contributions of consumption by food groups, at various food consumption occasions and places of consumption to the total consumption of food groups were calculated. In this report, the different categories for place of consumption were aggregated into the following categories: At home (includes At the home of friends/family), In a restaurant (includes Fast-food, Bar/café and Self-service restaurant), At school/work and Outside and traveling (includes On the street and Car, boat, plane, train). The different food consumption occasions were classified into the three main meals (Breakfast, Lunch and Dinner) and In between the main meals (before breakfast, during morning, afternoon and evening/at night). The main meals are defined according to the time of the day, so both Lunch and Dinner can be eaten as a cold or warm meal.

Also, the mean number of separate eating or drinking moments by time and by food consumption occasion was calculated based on the 24-hour recalls. As no information on energy values is available yet, we did not apply a minimum energy criterion for each eating occasion.

#### 2.3.5 *Comparison of food consumption with previous survey*

The dietary assessment methodology used for the DNFCs 2012-2014 was the same as the methodology used for DNFCs 2007-2010, apart for the age categories. However, as the GloboDiet classification in DNFCs 2012-2014 slightly differed from the classification in DNFCs 2007-2010, all foods were rearranged into the recent GloboDiet classification.

To investigate the change in consumption between 2007-2010 and 2012-2014 the mean consumption of main food groups of 9 to 18 year-olds, 19 to 50 year-olds and 51-69 year-olds in the current survey were compared with those in DNFCs 2007-2010. We assumed that the

skewness in the distribution did not affect this comparison. Also these data were weighted for socio-demographic characteristics, season and day of the week. The mentioned age groups are represented in both surveys. Arbitrary, only food groups with a consumption of more than 25 gram per day by the 9 to 69 year-olds were described in this report.



### 3 Study population

#### 3.1 Introduction

This chapter presents the response and representativeness of the participants in the DNFCs 2012-2014. First, the response to the recruitment of the first two years of the DNFCs 2012-2016 is described. Then, the representativeness of the study for day of the week and season is given. Finally several socio-demographic and lifestyle characteristics of the study population are described. These characteristics of the study population were compared to those in other national studies. Data was based on participant information at the completed questionnaires.

#### 3.2 Response

The response to the recruitment of the first two years of the DNFCs 2012-2016 is shown in Table 3.1. Of the 3,703 invited people 2,792 were eligible and willing to participate in the study (52 subjects were ineligible, 292 were not reached and 567 refused to participate). However, not all of these 2,792 completed the two 24-hour dietary recalls and the general questionnaire at December 2014 (n=521). For six participants the data was judged as unreliable and 28 participants were temporary ineligible due to pregnancy, lactation or diseases. Therefore, the interim net response of the population of the first two years of the DNFCs 2012-2014 was 61% (n=2,237).

Table 3.1 Response of invitees (DNFCs 2012-2014)

	Total		Boys/Men		Girls/Women	
	n	%	n	%	n	%
Overall sample	3,703	100	1,936	100	1,767	100
- Ineligible	52	1	31	2	21	1
Adjusted sample	3,651	100	1,905	100	1,746	100
- Non contacts	292	8	153	8	139	8
- Refusals	567	16	322	16	245	14
- Participants temporary ineligible	28	1	5	0	23	1
- Participant with incomplete material	521	14	272	14	249	14
- Participants with invalid data	6	0	3	0	3	0
- Participants with complete material	2,237	61	1150	60	1,087	62

Table 3.2 presents the response of the participants in the first two years of the DNFCs 2012-2016 by sex, age and socio-demographic characteristics. The response varied the most across the age and gender groups. It was the lowest among boys aged 9 to 18 years (51%). In children aged 1 to 3 years, the response was the highest (73%). Furthermore, the response was almost similar by educational level, region and urbanisation.

*Table 3.2 Response and representativeness on socio-demographic characteristics of participants in DNFCs 2012-2014.*

	Overall sample			Net sample		Weighted sample
	Num- ber	%	Pre- liminary response %	Num- ber	%	%
<b>Total</b>	3,703	100	60	2,237	100	100
<b>Gender/Age group<sup>a</sup></b>						
Boys and girls, 1-3 years	517	14	73	362	16	3
Boys and girls, 4-8 years	456	12	63	296	13	6
Boys, 9-18 years	506	14	51	259	12	6
Girls, 9-18 years	468	13	58	273	12	5
Men, 19-50 years	508	14	53	273	12	23
Women, 19-50 years	487	13	53	259	12	22
Men, 51-79 years	421	11	67	281	13	17
Women, 51-79 years	340	9	69	234	10	17
<b>Educational level<sup>b, c</sup></b>						
Low	1,041	28	56	429	19	24
Middle	1,520	41	61	852	38	43
High	1,133	31	63	952	43	33
Not available	9	0	0	4	0	0
<b>Region<sup>c</sup></b>						
West	1,642	44	60	977	44	45
North	382	10	64	246	11	10
East	825	22	61	504	23	21
South	854	23	60	510	23	24
<b>Urbanisation<sup>c</sup></b>						
Extremely/Strongly urbanised	1,714	46	58	994	44	48
Moderately urbanised	714	19	62	443	20	20
Hardly/not urbanised	1,275	34	63	800	36	32

<sup>a</sup> Age:

- Age of overall sample was determined at the moment of screening
- Age of net sample or weighted sample was determined on the first recall day

<sup>b</sup> Education:

- For children (1 to 18 years) highest education of parents is presented

<sup>c</sup> Format of educational level, region and degree of urbanisation is described in section 2.2.2

### 3.3 Representativeness of the study population

#### 3.3.1 *Distribution across day of the week and season*

Table 3.3 shows the number and distribution of the recalled days by day of the week and season. Respondents of 1 to 15 year-olds and respondents of 70 years or older were visited at home, while respondents of 16 to 69 year-olds were interviewed by telephone. The interview days were not planned on national and/or religious holidays, or when the participant was on holiday. The distributions of the current eligible sample by day of the week were, apart from some minor differences, almost optimal. However, for face to face interviews the recall days were less equally distributed; Saturdays were underrepresented with 11% and Tuesdays and Thursdays were overrepresented with 17%. The recalls were almost equally spread during the year.

*Table 3.3 Distribution of recall days among days of the week and seasons in DNFCs 2012-2014.*

	Total n=4,474		Men n=2,300		Women n=2,174		Face to face n=1,750		Telephone n=2,724	
	n	%	n	%	n	%	n	%	n	%
<b>Day of the week</b>										
Monday	652	15	343	15	309	14	248	14	404	15
Tuesday	732	16	373	16	359	17	296	17	436	16
Wednesday	692	15	347	15	345	16	256	15	436	16
Thursday	645	14	325	14	320	15	305	17	340	12
Friday	571	13	291	13	280	13	235	13	336	12
Saturday	560	13	298	13	262	12	192	11	368	14
Sunday	622	14	323	14	299	14	218	12	404	15
<b>Combination of recall days</b>										
1 weekday, 1 weekend <sup>a</sup> day	1,061	47	544	47	517	48				
2 weekdays	830	37	422	37	408	38				
2 weekend days	346	15	184	16	162	15				
<b>Season<sup>b</sup></b>										
Spring	546	24	284	25	262	24				
Summer	566	25	289	25	277	25				
Autumn	535	24	271	24	264	24				
Winter	590	26	306	27	284	26				

<sup>a</sup> Friday, Saturday, Sunday

<sup>b</sup> Spring: March, April, May; Summer: June, July, August; Autumn: September, October, November; Winter: December, January, February

### 3.3.2 *Socio-demographic characteristics*

In Tables 3.4.a and 3.4.b several socio-demographic characteristics by each age gender group are presented. Three-quarter of the children lived in households of four people or more. For about 10% of the children (1 to 18 years), both carers were lowly educated, whereas for 38% (1 to 3 years), 41% (4 to 8 years) and 47% (9 to 18 years) the carers had a middle educational level. Respectively, 54% and 50% of the children aged 1 to 3 years and 4 to 8 year-olds had at least one carer who was highly educated, for 9 to 18 year-olds 41% of the carers were highly educated. For about two-thirds of the children both carers were employed. Most of the children were living in the western part of the Netherlands (43 to 47%). More than 40% lived in extremely or strongly urbanised areas, whereas about 12 to 14% lived in areas with a very low population density. The study population under 19 years of age included 6% non-Western immigrants.

For adults up to 50 years about 50% lived in households of 2 to 3 people, whereas this was 67 to 77% for people aged 51 to 79 years old. The percentage of households with four or more people was lower in the 51 to 79 year-olds (5 to 7%) than in the 19 to 50 year-olds (24 to 35%). For participants older than 50 years, the size of households decreased again with more women than men living alone.

Almost half of the population up to 50 years was moderately educated; in the 51 to 79 year-old groups this percentage was somewhat lower, 41% and 35% for men and women, respectively. In the population up to 50 years, more women (36%) than men (32%) were highly educated, whereas from 51 years onwards more men (29%) than women (19%) were highly educated.

More than 40% of the adults and elderly lived in the western part of the Netherlands and in extremely or strongly urbanised areas. 3 to 10% of the study population was not of Dutch origin. The percentage of non-Western immigrants was 0 to 8%; the highest in the female age group of 19 to 50 years (8%).

Men were more often in employment than women. Overall, older people were less often employed than younger adults.

The study design ensured a representative distribution among region, and urbanisation and educational level within all age-sex groups. Small deviances in the distributions occurred compared to the targets based on national figures from CBS<sup>7</sup> (see Table 3.2; personal communication with CBS). However, among the nationwide population the percentage of immigrants is higher than in this study.

Table 3.4.a Characteristics of Dutch children aged 1 to 18 years (DNFCS 2012-2014), weighted for socio-demographic characteristics and season.

	Boys and girls, 1-3 years n=362 %	Boys and girls, 4-8 years n=296 %	Boys, 9-18 years n=259 %	Girls, 9-18 years n=273 %
<b>Size of household</b>				
2 and 3	27	21	25	26
4	44	48	43	43
5+	29	30	32	31
<b>Highest educational level of carer(s)<sup>a</sup></b>				
Low	8	9	12	12
Middle	38	41	46	47
High	54	50	41	41
Unknown	0	0	1	0
<b>Working status of carer(s)</b>				
All carers (1 or 2) are working	69	71	76	71
At least one carer is not working	31	29	23	28
At least for one carer unknown	0	0	1	1
<b>Region</b>				
West	47	45	44	43
North	10	10	10	10
East	22	23	23	23
South	21	22	23	23
<b>Urbanisation</b>				
Extremely urbanised	18	18	18	15
Strongly urbanised	32	28	26	28
Moderately urbanised	20	21	21	21
Hardly urbanised	18	20	23	22
Not urbanised	12	13	12	14
<b>Ethnicity</b>				
Dutch	93	92	92	92
Western immigrant	1	2	1	2
Non-Western immigrant	6	6	7	6

<sup>a</sup> Missing information for 2 boys and 1 girl 9 to 18 years

Table 3.4.b Characteristics of Dutch adults aged 19 to 79 years (DNFCS 2012-2014), weighted for socio-demographic characteristics and season.

	Men, 19-50 years n=273 %	Women, 19-50 years n=259 %	Men, 51-79 years n=281 %	Women, 51-79 years n=234 %
<b>Size of household</b>				
1	17	11	15	26
2 and 3	48	46	77	67
4	24	35	7	5
5+	12	9	1	2
<b>Highest educational level<sup>a</sup></b>				
Low	21	19	31	46
Middle	47	45	41	35
High	32	36	29	19
<b>Region</b>				
West	46	47	42	43
North	10	10	11	11
East	21	21	21	21
South	23	22	26	26
<b>Urbanisation</b>				
Extremely urbanised	23	18	18	18
Strongly urbanised	29	34	25	26
Moderately urbanised	19	19	21	21
Hardly urbanised	20	21	25	25
Not urbanised	9	8	11	10
<b>Ethnicity</b>				
Dutch	90	92	97	97
Western immigrant	4	1	3	2
Non-Western immigrant	6	8	0	1
	Men, 19-50 years n=273 %	Women, 19-50 years n=259 %	Men, 51-70 years n=141 %	Women, 51-70 years n=118 %
<b>Working status<sup>b</sup></b>				
Employed	72	68	50	46
Unemployed	27	32	50	54
Unknown	1	0	0	0

<sup>a</sup> Missing information for 1 woman 51 to 79 years

<sup>b</sup> No information available on working status from 71 years onwards

### 3.3.3

#### Lifestyle characteristics

##### Anthropometry

Mean self-reported and measured height and weight and an evaluation of the body mass index (BMI) are presented in Tables 3.5.a and 3.5.b.

The percentage of overweight and obesity increased with age from 10% of the 1 to 3 year-olds to 74% of the women aged 51 to 70 years.

Percentages of overweight were somewhat lower in the age group of 16 to 18 year-old boys and girls than in the other groups. The method of measurement might be the explanation of this difference, as for children up to 15 years, body weight was measured, whereas for children aged 16 to 18 years and adults this was self-reported. About 5 to 12% of the children aged up to 19 years were (seriously) underweight.

Among the 71 to 79 year-olds waist circumference was measured rather than height and weight to assess 'overweight' status. Respectively, 54% of the men and 74% of the women aged 71 to 79 years had a waist circumference of  $\geq 102$  and  $\geq 88$  cm respectively. However, there is no consensus on the waist circumference cut offs yet. Results should be interpreted with caution. About 12% of the 71 to 79 year-olds were undernourished, based on cut off level of a mid-upper arm circumference below or equal to 25 cm or unintended weight loss of 4 kg in 6 months. This percentage is comparable with that in the previous survey among older adults.<sup>15</sup>

Compared to the figures of the Lifestyle Monitor<sup>7, 18</sup> and the previous DNFCSS,<sup>15, 19</sup> the reported weights and also the prevalence of obesity were for most age groups higher in this study. This is especially the case for women aged 51 to 70 year. In the DNFCSS 2007-2010, the percentage of obese women in this age category was 23 versus 39% nowadays. However, the number of women in this specific age group is in the current survey low. Also waist circumference was slightly larger in this study population compared to the DNFCSS among older adults.<sup>15</sup>

Table 3.5.a Mean height, weight and BMI of Dutch children and adults aged 1 to 70 years (DNFCS 2012-2014), weighted for socio-demographic characteristics and season. Height and weight were measured for children 1 to 15 years old and self-reported for those aged 16 to 70 years.

	<b>Boys and girls, 1-3 years n=361 mean</b>	<b>Boys and girls, 4-8 years n=295 mean</b>	<b>Boys, 9-15 years n=194 mean</b>	<b>Girls, 9-15 years n=199 mean</b>	<b>Boys, 16-18 years n=65 mean</b>	<b>Girls, 16-18 years n=74 mean</b>	<b>Men, 19-50 years, n=273 mean</b>	<b>Women, 19-50 years n=259 mean</b>	<b>Men, 51-70 years n=141 mean</b>	<b>Women, 51-70 years n=118 mean</b>
<b>Height (cm)</b>	91.8	121.6	160.4	155.0	180.0	170.4	183.0	169.5	180.4	166.6
<b>Weight (kg)</b>	14.0	24.3	51.1	48.2	71.9	64.1	85.1	76.2	90.2	80.3
<b>BMI (kg/m<sup>2</sup>)<sup>a</sup></b>	16.5	16.3	19.4	19.8	22.1	22.1	25.4	26.5	27.7	29.0
<b>Evaluation of BMI<sup>b</sup></b>	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>
Seriously underweight	3	1	0	1	0	0	1	0	0	0
Underweight	5	4	7	11	7	9	2	1	0	1
Normal weight	82	77	73	63	74	75	52	46	28	25
Overweight	7	15	17	20	13	11	33	31	48	35
Obesity	3	2	4	5	6	5	13	22	24	39

<sup>a</sup> BMI for children is based on the Extended International (IOTF) body mass cut-offs

<sup>b</sup> Missing information on BMI for 1 person 1 to 3 years and 1 person 4 to 8 years



*Table 3.5.b Mean weight, waist and upperarm circumferences of Dutch adults aged 71 to 79 years (DNFCS 2012-2014), weighted for socio-demographic characteristics and season.*

	<b>Men, 71-79 years measured n=140 mean</b>	<b>Women, 71-79 years measured n=116 mean</b>
<b>Weight (kg)</b>	86.1	75.0
<b>Upperarm circumference (cm)</b>	30.1	30.3
<b>Waist circumference (cm)</b>	103.7	97.3
<b>Evaluation of waist-circumference (WC)</b>	<b>%</b>	<b>%</b>
Men WC 79-102 cm/ women WC 68-88 cm	46	22
Men WC $\geq$ 102 cm / women WC $\geq$ 88 cm	54	74
Unknown	0	4
<b>Undernutrition</b>	<b>%</b>	<b>%</b>
No undernutrition	85	87
At risk of undernutrition <sup>a</sup>	1	
Undernutrition <sup>b</sup>	14	10
Unknown	0	3

<sup>a</sup> At risk of undernutrition is loss of appetite in last week and difficulties in walking stairs of 15 steps.

<sup>b</sup> Undernutrition is mid-upper arm circumference <25 cm or unintended weight loss 4 kg in 6 months.

*Physical activity*

Results on physical activity are shown in Tables 3.6.a and 3.6.b. For children up to 19 years old both physical activity and sedentary activities (watching TV/Video/DVD/PC) are presented. 53% of the 1 to 3 year-olds were moderately active for 3.5 to 14 hours per week. Of the children aged 4 to 11 years old, 71% met the norm-active of more than 7 hours physical activity per week. This number decreased in the age group of 12 to 18 years (56% for boys and 46% for girls). The time spent on sedentary activities increased with age: 11% of the 1 to 3 year-olds watched TV/Video/DVD/PC for more than 14 hours a week, of the 4 to 11 year-olds this was 35% and for the 12 to 18 year-olds this was 79% for boys and 61% for girls.

For adults 70 to 83% met the Dutch Standard for Healthy Exercise (NNGB), while 6% to 48% met the fitness standard of at least 20 minutes of heavy intensive activity at least three times a week. About three quarter of the population met the NNGB or the fitness standard. These results are comparable to the results of the previous DNFCs 2007-2010<sup>19</sup>. The results of compliance with the physical activity guideline for adults were fairly high compared with the general data on physical activity in the Netherlands from 2014<sup>7</sup>. In 2014, around half of the adults (20 to 55 years) and one third of the adolescents (12 to 20 years) complied with the recommendations. Furthermore, three quarter of the older adults (55 to 75 years), complied with the recommendations compared with 82% to 83% in our study population. The observation that women in the age group 19 to 50 years comply with the recommendations more often than men in that age group, has been observed before.

Table 3.6.a Characteristics of physical activity in Dutch children aged 1 to 18 years (DNFCS 2012-2014), weighted for socio-demographic characteristics and season.

	Boys and girls, 1-3 years n=377 <sup>a</sup> %	Boys and girls, 4-11 years n=429 <sup>b</sup> %	Boys, 12-18 years n=194 %	Girls, 12-18 years n=190 %
<b>TV/Video/DVD/PC</b>				
Few (<3.5 hours/week)	37	7	1	2
Moderate (3.5-<14 hours/week)	53	58	20	37
Many (>14 hours/week)	11	35	79	61
<b>Physical activity</b>				
Few (<3.5 hours/week)	30			
Moderate (3.5-<14 hours/week)	54			
Many (>14 hours/week)	16			
Inactive (<3 hours/week)		5	19	21
Semi-inactive (3-<5 hours/week)		10	9	16
Semi-active (5-<7 hours/week)		14	13	13
Norm-active (>7 hours/week)		71	56	46
Unknown				2
<b>Sports</b>				
Few (<1 hour/week)	56	52		
Moderate (1-<3 hour/week)	39	32		
Many (>3 hours/week)	6	16		

<sup>a</sup> including 15 4 year-olds    <sup>b</sup> including 4 12 year-olds

Table 3.6.b Characteristics of Dutch adults aged 19 to 79 years (DNFCS 2012-2014), weighted for socio-demographic characteristics and season.

	Men, 19-50 years n=273 %	Women, 19-50 years n=259 %	Men, 51-79 years n=281 %	Women, 51-79 years n=234 %
<b>NNGB<sup>a</sup></b>				
Inactive	4	4	4	2
Semi-active	27	21	13	17
Norm-active	70	75	83	82
<b>Fitness standard</b>				
Inactive	64	78	25	34
Semi-active	19	16	30	18
Norm-active	17	6	46	48
<b>Combination of NNGB and fitness standard</b>				
No compliance to NNGB or fitness standard	s	25	17	18
Compliance to NNGB or fitness standard	72	75	83	82

<sup>a</sup>NNGB = Dutch Standard for Healthy Exercise

### Smoking

Information on smoking by the adolescent and adult population is presented in Table 3.7. For children under 12 years of age no information was gathered on tobacco use through the general questionnaire.

In the adolescents, aged 12 to 18 years, 88% of the boys and 84% of the girls had never smoked. 4 to 7% of the boys and girls in this age group was a current smoker. In the age group of 19 to 50 years, the percentage of smokers was the highest, respectively 31% for males and 23% for females. About half of the population in this age group had never used tobacco in their lives. From 51 years onwards, the number of smokers decreased to 17% for males and 20% for females. In this age group, more males than females quit smoking at some point in their lives, respectively 62% for males and 45% for females. The number of current smokers, stopped smokers and non-smokers are comparable with the percentages reported in the DNFCs 2007-2010<sup>19</sup> and with the general data on smoking in the Netherlands from 2014.<sup>7</sup>

*Table 3.7 Smoking by the Dutch population aged 12 to 79 years (DNFCS 2012-2014), weighted for socio-demographic characteristics and season.*

	<b>Boys, 12-18 years n=197 %</b>	<b>Girls, 12-18 years n=191 %</b>	<b>Men, 19-50 years n=273 %</b>	<b>Women, 19-50 years n=259 %</b>	<b>Men, 51-79 years n=281 %</b>	<b>Women, 51-79 years n=234 %</b>
<b>Smoking of at least 1 cigarette/ cigar/pipe per day</b>						
Yes	4	7	31	23	17	20
No, but did use tobacco in the past	8	8	21	27	62	45
No, never used tobacco	88	84	48	50	21	34

### Alcoholic beverages

Information in the general questionnaires on the use of alcoholic beverages by the adolescent and adult population is presented in Table 3.8. Three-quarter of the 12 to 18 year-olds, about one sixth of the adult men and one third of the adult women indicated not to drink alcoholic beverages, twice as many females as males. The others mentioned to drink alcohol. Around 11 to 31% of the population indicated to drink only during weekend days (Fridays, Saturdays and Sundays).

The non-users of alcoholic drinks were comparable for the adolescents and fairly high for the adults compared with the general data on alcohol use in the Netherlands from 2014.<sup>7</sup> In that survey, 72% of the adolescents (12 to 18 years) indicated not to consume any alcohol. For adults aged 20 to 75 years the percentage of non-users varied between 5 to 8%, whereas in the DNFCs 2012-2014 this was 17-18% for men and 33-35% for women (19 to 50 years).

*Table 3.8 Alcohol use by the Dutch population aged 12 to 79 years (DNFCS 2012-2014), weighted for socio-demographic characteristics and season.*

	<b>Boys, 12-18 years n=197 %</b>	<b>Girls, 12-18 years n=191 %</b>	<b>Men, Women, 18-50 years n=273 %</b>	<b>Men, Women, 18-50 years n=259 %</b>	<b>Men, Women, 51-79 years n=281 %</b>	<b>Men, Women, 51-79 years n=234 %</b>
No use of alcoholic drinks	77	74	17	35	18	33
Use of alcoholic drinks only on weekend days	11	13	21	31	11	12

### 3.3.4

#### *Conclusion*

The study population is assumed to be representative for the population in the Netherlands with regard to age, level of education, region of residence and for the diet across a calendar year. For small deviances in the distributions, these factors were taken into account in the weighing factor. In addition, the data were collected over all seasons and days of the week. However, based on the comparison on the lifestyle characteristics, we observed some differences. Obesity was more prevalent in this survey, compliance with the physical activity guideline seemed to be higher and smoking was comparable. The results of non-alcoholic drinkers for adults were comparable for the adolescents and fairly higher for the adults. Based on the current findings it is not possible to conclude in which direction this potential selection bias could have affected the results. Especially in the group of women aged 51 to 70 obesity the impact of potential selection bias could have been larger. After finishing the whole survey, with more data per subgroup, it would be possible to look in more detail to these differences.

By study design, the results are not fully representative for immigrants, nor for pregnant and lactating women. A specific food consumption survey needs to be carried out to assess the dietary intake of these groups.



## 4 General dietary characteristics

### 4.1 Introduction

This chapter presents general characteristics of the diet. It describes some food patterns, type of special diets or eating habits, use of discretionary salt and the intake of dietary supplements. Data is based on participant information at the completed questionnaires as well as the 24-hour recalls.

### 4.2 Food patterns

Almost all children aged 1 to 8 years had breakfast daily. This percentage decreased during adolescence. At the age of 19 to 50 years, almost one out of three men and one out of five women did not have breakfast every day. In people over 50 years of age, respectively 82% for males and 87% for females had breakfast daily. 1% of the young children, 4% of the adolescents and 4 to 6% of the adults reported that they (almost) never had breakfast. A comparison with the previous survey suggests that the percentage of skipping breakfast was lower. These findings should be confirmed with data from the total survey.

The food consumption occasions, as registered during the 24-h dietary recalls, were categorised into breakfast, lunch, dinner and in between meals (before breakfast, during morning, afternoon and evening/at night). Figure 4.1 shows the percentage of subjects reporting food consumption per moment of food consumption on *both* 24-hour recall days. Also in this figure we observed a higher percentage of young children having breakfast compared to the older age groups. Furthermore, the majority of the study population had three main meals during the day. Only a few had no breakfast (2%), lunch (3%) or dinner (0%) on both days (data not shown). Furthermore, the older age groups usually also consumed something during the evening or night or before breakfast. The youngest children aged 1 to 8 years and the oldest age groups almost always consumed foods during the morning. About half of the youngest age groups consumed something after dinner.

Figure 4.2 shows at which times throughout the day, breakfast, lunch, dinner and in between meals were consumed. Respondents themselves defined their consumption for the different meals. Most people started their breakfast between 7:30 and 9:00 hour. For lunch, that was between 12:00 and 13:00 hour. Most of the people started their dinner at 18:00 hour. The figure also illustrates that the Dutch were common to consume during the whole day.

Table 4.1 General characteristics of the diet of the Dutch population aged 1 to 79 years (DNFCS 2012-2014), weighted for socio-demographic characteristics and season.

	<b>Boys and girls, 1-3 years n=362 %</b>	<b>Boys and girls, 4-8 years n=296 %</b>	<b>Boys, 9-18 years n=259 %</b>	<b>Girls, 9-18 years n=273 %</b>	<b>Men, 19-50 years n=273 %</b>	<b>Women, 19-50 years n=259 %</b>	<b>Men, 51-79 years n=281 %</b>	<b>Women, 51-79 years n=234 %</b>
<b>Breakfast</b>								
7 days/week	97	97	85	82	69	80	82	87
4 - 6 days/week	2	3	10	8	18	11	9	5
1 - 3 days/week	1	0	1	5	7	5	3	3
never/less than once/week	1	0	4	4	6	4	6	4
<b>Special diet<sup>a</sup></b>	9	8	7	8	8	16	16	22
<b>Special eating habits<sup>b</sup></b>	4	3	1	7	5	5	2	9

<sup>a</sup> Special diet = e.g. cow's milk protein free, lactose restricted, diabetes, energy restricted

<sup>b</sup> Special eating habits = e.g. vegetarian, vegan, macrobiotic, anthroposophic



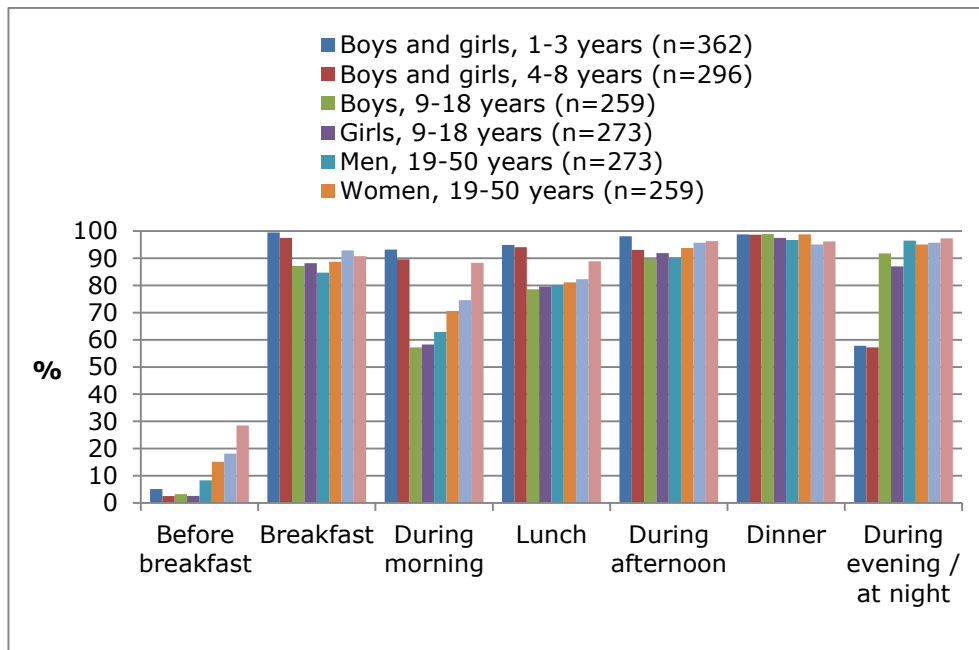


Figure 4.1 Percentage of respondents reporting food consumption per moment of food consumption on both 24-hour recall days stratified by age-gender groups (DNFCS 2012-2014; n=2,237), weighted for socio-demographic characteristics, season and day of the week.

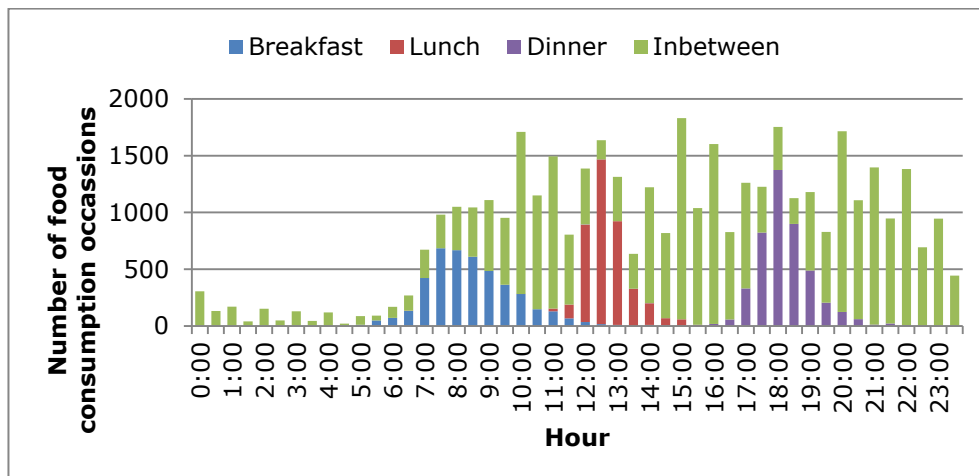


Figure 4.2 Number of food consumption occasions by hour of the Dutch population (DNFCS 2012-2014; n= 2,237) stratified by age-gender groups, weighted for socio-demographic characteristics, season and day of the week.

### **4.3 Diet or eating habit**

More adults than children and more women than men reported specific diets and special eating habits (see Table 4.1). One out of five women aged 51 to 79 reported a special diet (e.g. diabetes, energy restricted, cow's milk protein free, lactose restricted). Among children, this is 8-9 percent. These percentages were similar compared to that in the previous DNFCs.<sup>19</sup> The percentage of the study population following special eating habits (e.g. vegetarian, vegan, macrobiotic, anthroposophical) was lower. That percentage varied between 1 and 9 percent across the different age-gender groups.

### **4.4 Discretionary salt use**

Information on discretionary salt used in home-prepared meals and at the table of the Dutch population is shown in Table 4.2. Two out of five of the 1 to 3 year-old boys and girls never used any salt that is added during the preparation of a meal or at the table. In the older age groups, this varied between 17 and 30%. The percentages among adults were similar to those found in the Doetinchem Study.<sup>20</sup> The majority indicated to add salt only during preparation of the meal (49 to 63%). The percentage adding salt during the meals was lower (6 to 14%). A comparison with results on the previous DNFCs suggests that in the current survey especially more children indicated not to add discretionary salt. In 2010, this percentage was 10% in children aged 7 to 18 years.<sup>21</sup> However, this difference can be due to the different questionnaire on salt use, which makes it complex to draw conclusions based on these preliminary findings.

Table 4.2 Discretionary salt used in home-prepared meals and/or at the table of the Dutch population aged 1 to 79 years (DNFCS 2012-2014), weighted for socio-demographic characteristics and season.

	<b>Boys and girls, 1-3 years n=362 %</b>	<b>Boys and girls, 4-8 years n=296 %</b>	<b>Boys, 9-18 years n=259 %</b>	<b>Girls, 9-18 years n=273 %</b>	<b>Men, 19-50 years n=273 %</b>	<b>Women, 19-50 years n=259 %</b>	<b>Men, 51-79 years n=281 %</b>	<b>Women, 51-79 years n=234 %</b>
Yes, both at preparation and at the table	3	5	15	10	11	10	12	10
Yes, only at preparation	49	59	51	45	62	56	57	63
Yes, only at the table	7	8	14	9	8	10	12	6
No, never	41	28	17	30	17	23	19	20
Participant does not know	0	0	4	6	2	0	0	1

## 4.5 Dietary supplements

Figure 4.3 shows that 42% of the study population reported the use of dietary supplements in the general questionnaire, this varied between the age-gender groups (28-75%). Dietary supplement use was highest in young children and women; about three quarter of the 1 to 3 year-olds, more than half of the 4 to 8 year-olds and women above 50 years, and about 45% of 9 to 50 year-old women used dietary supplements. The least use of dietary supplements was reported by males aged 19 years and older (28%). This use was higher in the winter than during the rest of the year (data not shown in figure). These results were similar compared to DNFCs 2007-2010.

In Table 4.3 the difference between the reported supplement use during the past winter and the rest of the year is shown. The most commonly taken dietary supplements in all age groups were multivitamins/minerals, both in winter and during the rest of the year. Overall, more dietary supplements were used in wintertime, especially vitamin C and multivitamins/minerals by all age groups. Dietary supplements with fish oil were also used by all age groups (2 to 16%). These results were in line with the results of DNFCs 2007-2010.

Vitamin D supplementation is recommended<sup>22</sup> for those with a dark skin or insufficient sunlight exposure, for young children under the age of 4, for women above 50 years of age and men above 70 years of age.<sup>22</sup> 70% of these young children and 48% of 50+ women were taking vitamin D containing dietary supplements in the winter, during the rest of the year this was 65% and 38%, respectively. Among the men above 70 years this percentage was 20% during the winter and 15% during the rest of the year (data not shown). The percentage of women above 50 years of age taking a vitamin D supplement was comparable with the intake by women in the same age groups in DNFCs 2007-2010<sup>19</sup> and in DNFCs 2010-2012.<sup>15</sup>

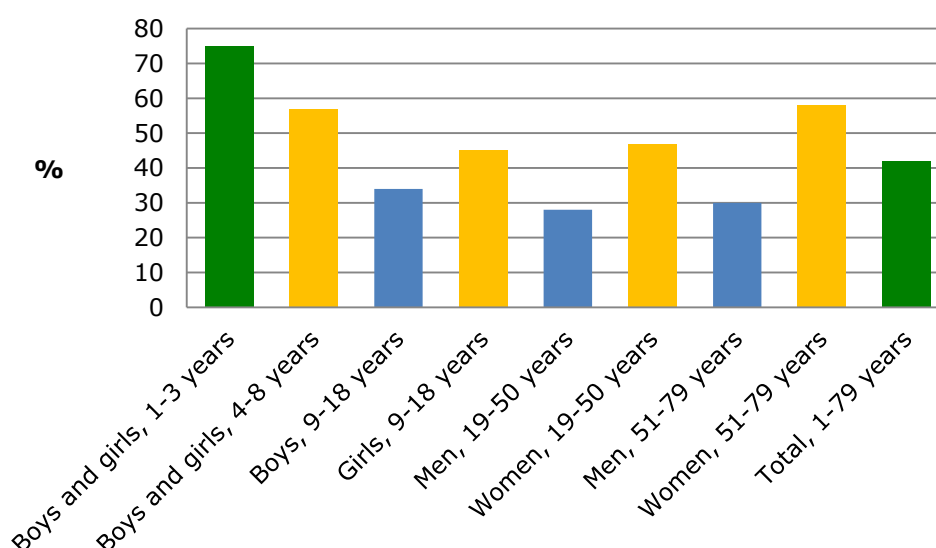


Figure 4.3 Percentage dietary supplement users in the Dutch population stratified by age-gender groups (DNFCs 2012-2014; n=2,237), weighted for socio-demographic characteristics, season and day of the week.

Table 4.3 Use of dietary supplements by the Dutch population aged 1 to 79 years (DNFCS 2012-2014), weighted for socio-demographic characteristics and season.

	Boys and girls, 1-3 years n=362		Boys and girls, 4-8 years n=296		Boys, 9-18 years n=259		Girls, 9-18 years n=273		Men, 19-50 years n=273		Women, 19-50 years n=259		Men, 51-79 years n=281		Women, 51-79 years n=234	
	W %	R %	W %	R %	W %	R %	W %	R %	W %	R %	W %	R %	W %	R %	W %	R %
Overall supplement use	72	67	57	39	30	20	43	29	27	19	45	37	27	24	57	47
Multivitamins without minerals	7	5	10	5	2	2	7	2	3	2	8	5	2	2	4	3
Multivitamins with minerals	24	19	38	28	22	14	29	19	20	12	32	25	19	16	36	28
Beta-carotene	2	2	0	0	0	0	0	0	1	0	1	1	2	2	1	2
Vitamin B12	2	2	3	1	2	1	2	2	2	2	8	6	5	4	8	7
Vitamin B complex	3	2	2	1	1	1	3	2	4	2	12	9	3	3	12	10
Folic acid	2	2	0				1	0	0	0	5	4	2	2	1	2
Vitamin C	10	5	11	4	8	5	15	11	11	7	19	12	8	4	18	11
Vitamin D	55	53	13	8	4	2	10	8	3	2	8	5	5	5	18	14
Calcium/Vitamin D	6	5	2	2	1	1	2	2	1	0	2	2	4	4	12	11
Vitamin E	2	2	2	1	1	1	2	2	1	1	2	2	1	1	3	4
Calcium	2	2	1	1	1	0	2	2	1	1	3	1	3	2	7	5
Iron	1	1	1	0	1	0	1	2	1	1	8	5	1		3	2
Magnesium	2	2	1	1	0	0	3	2	1	1	6	5	3	2	11	11
Fish oil or omega-3 fatty acids	3	3	5	3	5	3	6	6	2	2	9	6	7	6	16	14
Garlic	3	2	1	0	1	1	4	1	5	3	1	1	6	2	6	5
Ginseng	1	1	0	0	0	0	0	0	1	0	0	0	1	0	2	2
Ginkgo	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2	2
Glucosamine	1	1	0	0	0	0	0	0	0	0	2	3	3	2	10	8
Echina Force	4	3	2	0	2	0	4	3	2	2	6	4	0	0	9	3
Q10	1	1	0	0	0	0	0	0	0	0	1	0	2	0	2	2
Cranberry	1	2	1	0	0	0	2	2	1	1	7	3	2	0	6	5
Vitamin D total	70	65	52	36	24	15	39	25	29	15	37	29	25	22	48	38

W = % users of specific supplements during winter; R = % users of specific supplements during the rest of the year

<sup>a</sup> Total vitamin D is based on the vitamin D containing supplements: multi-vitamins, vitamin D and calcium/vitamin D



## 5 Foods and drinks

### 5.1 Introduction

This chapter presents data of the consumption of foods and drinks by the participants in DNFCs 2012-2014 (n=2,237). First, the consumption of food groups according to the GloboDiet classification for each age-gender group is presented. Within this classification both foods and drinks are represented. In section 5.3, the consumption of food groups by place and moment is described. In the last section, a comparison is made with the findings from the previous DNFCs in 2007-2010.

### 5.2 Food groups

#### 5.2.1 Consumed quantities

The mean food group consumption by each age-gender group and for the whole population is presented in Figure 5.1 and in Tables 5.1.a to 5.1.h. A Dutch person (1-79 years old, consumes on average 3.1 kg drinks and foods per day. About 60% of this is in the form of 'Alcoholic' and 'Non-alcoholic beverages', such as water, tea and coffee, juice and soda. Of the remaining food and drinks (dairy), 41% was animal-based. Other food groups with a high contribution to the food intake (grams) were 'Dairy (products)', 'Cereal (products)', 'Vegetables', 'Fruit, nuts and olives' and 'Potatoes'.

The mean intake in the Dutch population of 'Vegetables' is 127 g/day, of 'Fruits, nuts and olives' it is 122 g/day. Of the mean intake of 355 g 'Dairy (products)', 208 g concerns 'Milk and milk beverages' and 33 g is 'Cheese'. Of the mean intake of 192 g 'Cereal (products)', 'Bread' covers 126 g. Daily, the Dutch population drinks more than 1.7 litre of 'Non-alcoholic beverages', of which about three quarter of a litre is 'Coffee and tea', more than half a litre is 'Water' and about 350 g concerns 'Soft drinks' and 'Fruit and vegetable juices'. For the total subdivision in food groups see Appendix B Table 5.1 (total population) and Appendix Tables 5.1.a-h (for age-sex groups).

The total consumed amount of foods and drinks increased by age; the 1 to 3 year-olds consumed on average less than 1.5 kg per day, while the adults consumed on average more than 3 kg. This increase by age was seen for most food groups.

Children, aged 4 to 18 year, consumed relatively much more 'Sugar and confectionary' than other groups. Furthermore, the consumption of 'Dairy (products)' was about equal for all groups, somewhat lower for females than for males. The mean consumption of 'Fruits, nuts and olives' was the lowest among the 9 to 18 year-olds and 19 to 50 year-old men. The consumption of 'Savoury snacks' was the highest for 9 to 18 and 19 to 50 year-old males.

The consumption of some food groups in the oldest age groups was lower as compared to the 19 to 50 year-olds. This was the case for

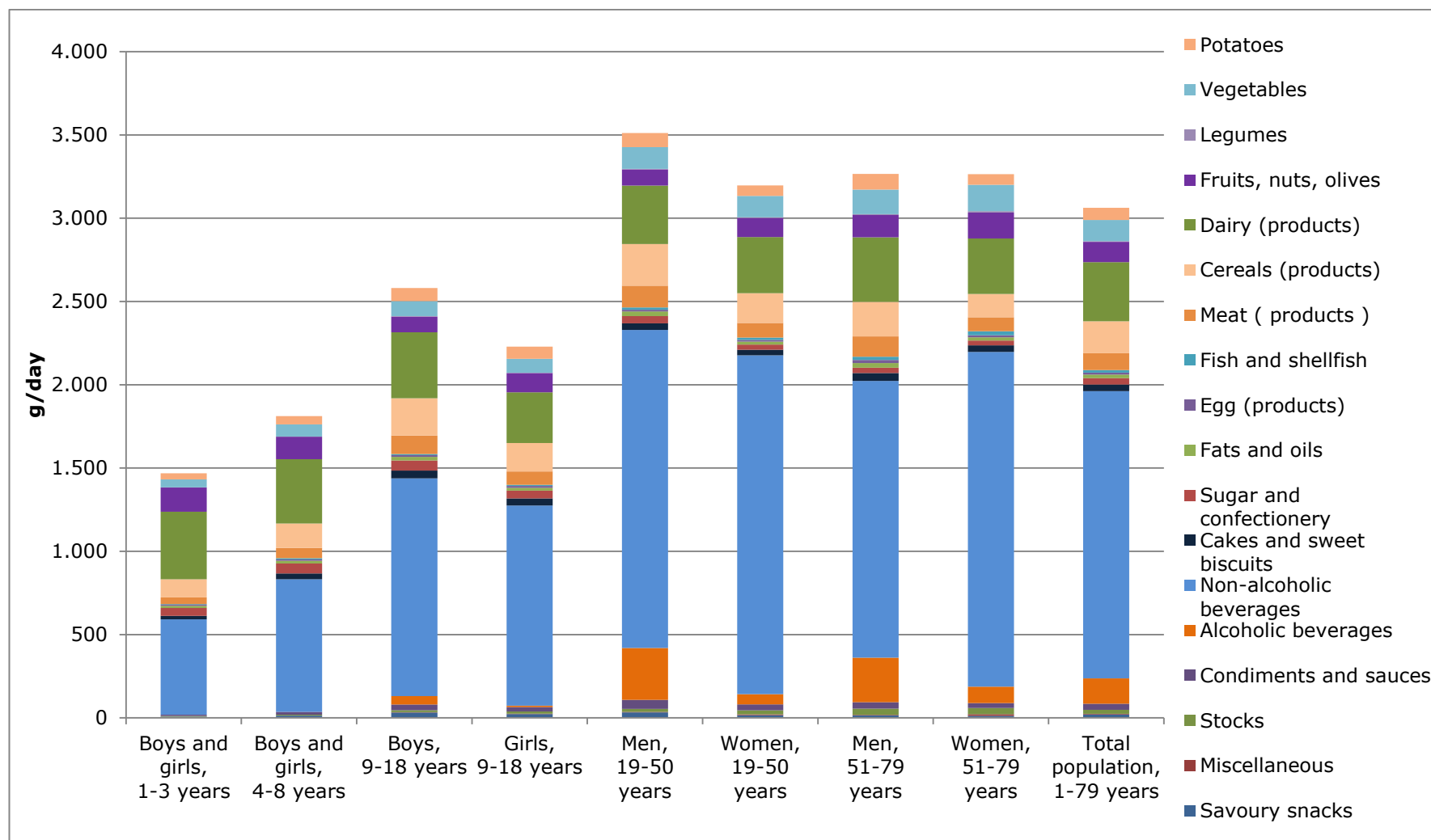


Figure 5.1 Consumption of food groups of the Dutch population stratified by age-gender groups (DNFCS 2012-2014;  $n = 2,237$ ), weighted for socio-demographic characteristics, season and day of the week.



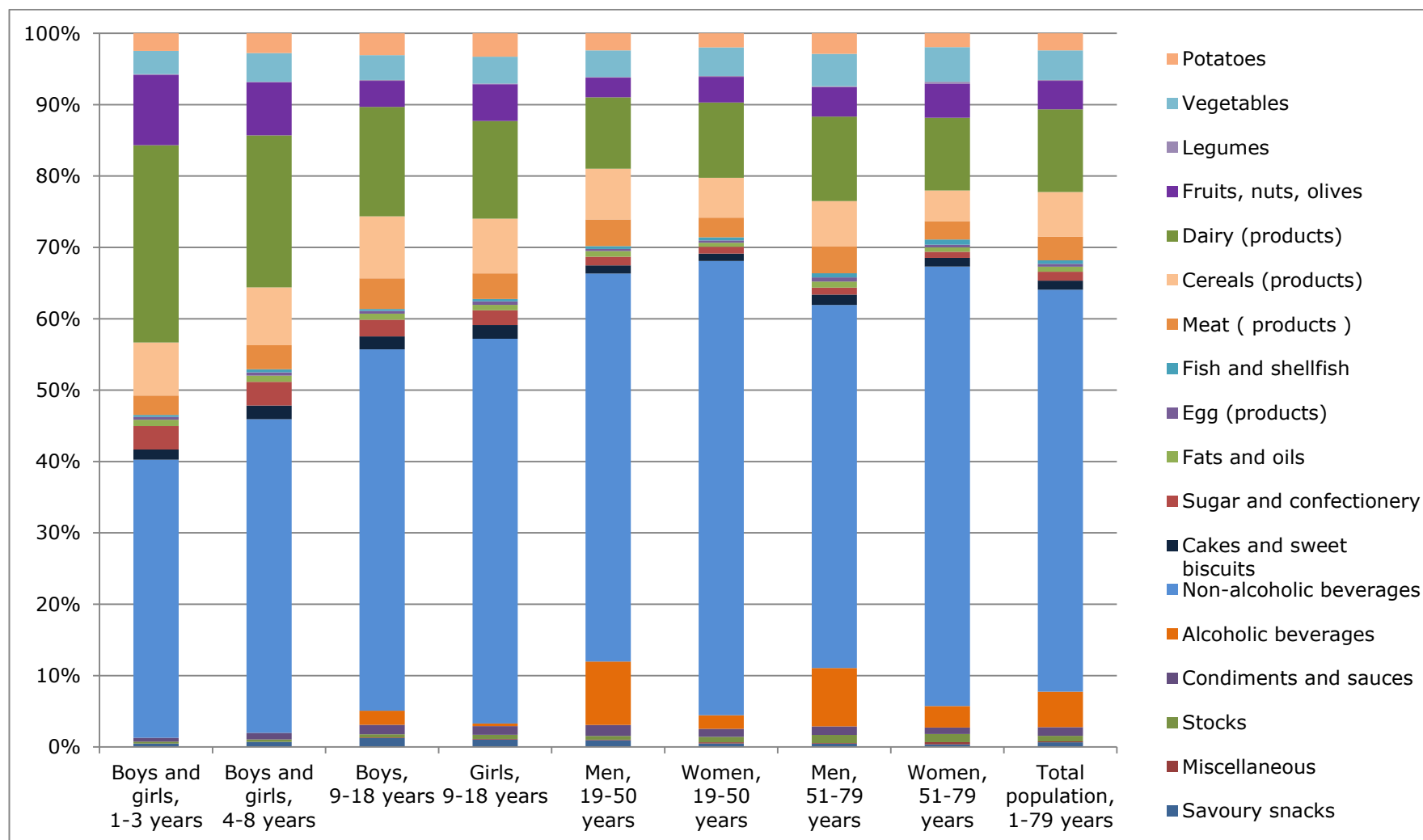


Figure 5.2 Consumption of food groups in percentages of the total consumption in g of the Dutch population stratified by age-gender groups (DNFCS 2012-2014; n= 2,237), weighted for socio-demographic characteristics, season and day of the week.

'Cereal (products)', 'Non-alcoholic beverages', 'Condiments and sauces' and 'Savoury snacks'.

Relatively to the total consumption in grams per day, for young children more than 20% is derived from 'Dairy (products)'; in older age groups this percentage diminishes to about 10%. Also the intake of 'Fruits, nuts and olives' is higher for young children (10% by 1-3 year-olds and 7% by the 4-8 year-olds) than at older ages (about 4%). The consumption of 'Non-alcoholic beverages' shows an inverse contribution to the daily total: from 40% by young children to more than 50% in older age groups and even more than 60% in female adults. The contribution by other food groups is about equal for different age groups (see Figure 5.2).

The average consumption differed also by gender. Boys aged 9 to 18 years and men aged 19 to 50 years consumed more than girls and women in those age groups.

In particular, male adolescents and adult men consumed in comparison to their female counterparts larger amounts of 'Potatoes', 'Cereal (products)', 'Meat (products)', 'Fats and oils', 'Sugar and confectionary', 'Alcoholic beverages', 'Condiments and sauces' and 'Savoury snacks'. Female adolescents and adults consumed larger quantities of 'Fruits, nuts and olives' than males. Other food group differences by gender were small.

Table 5.1 Consumption (main food groups) of the Dutch population (DNFCS 2012-2014), weighted for socio-demographic characteristics, season and day of the week (n=2,237).

Food groups based on GloboDiet classification	Mean g/day	P5 g/day	Median g/day	P95 g/day	% Consumption days	On consumption days			
						Mean g/day	P5 g/day	Median g/day	P95 g/day
01. Potatoes and other tubers	73	0	61	210	49	148	40	140	308
02. Vegetables	127	10	112	299	86	147	23	124	352
03. Legumes	4	0	0	37	4	103	18	96	225
04. Fruits, nuts and seeds, olives	122	0	87	352	66	184	18	151	448
05. Dairy products and substitutes	355	33	316	818	94	378	36	329	887
06. Cereals and cereal products	192	60	178	369	98	196	50	175	415
07. Meat, meat products and substitutes	101	11	90	223	90	112	19	95	274
08. Fish, shellfish and amphibians	15	0	0	87	13	114	13	96	280
09. Eggs and egg products	12	0	0	50	24	51	6	50	131
10. Fats and oils	22	3	19	53	94	24	3	20	58
11. Sugar and confectionery	38	0	27	113	76	50	5	36	143
12. Cakes and sweet biscuits	39	0	30	122	63	63	10	47	176
13. Non-alcoholic beverages	1,725	603	1,626	3,148	100	1,729	542	1,580	3,370
14. Alcoholic beverages	152	0	0	750	30	513	45	330	1,830
15. Condiments, spices, sauces and yeast	37	0	27	109	74	50	4	35	150
16. Soups and stocks	24	0	0	141	13	192	34	180	433
17. Miscellaneous	4	0	0	0	2	258	19	258	515
18. Savoury snacks	20	0	0	88	30	67	10	51	175
19. Ready meals	0	0	0	0	0	234	190	250	250

Table 5.1.a Consumption (main food groups) of Dutch children aged 1-3 years (DNFCS 2012-2014), weighted for socio-demographic characteristics, season and day of the week (n=362).

Food groups based on GloboDiet classification	Mean g/day	P5 g/day	Median g/day	P95 g/day	% Consumption days	On consumption days			
						Mean g/day	P5 g/day	Median g/day	P95 g/day
01. Potatoes and other tubers	36	0	31	97	52	69	16	62	140
02. Vegetables	48	0	39	125	73	65	9	51	163
03. Legumes	1	0	0	0	2	53	6	42	125
04. Fruits, nuts and seeds, olives	145	20	135	295	89	163	30	144	345
05. Dairy products and substitutes	406	125	402	745	99	413	84	397	777
06. Cereals and cereal products	109	47	103	197	99	110	35	103	215
07. Meat, meat products and substitutes	40	0	37	87	85	47	7	40	104
08. Fish, shellfish and amphibians	4	0	0	33	8	54	8	50	126
09. Eggs and egg products	6	0	0	31	21	31	2	25	90
10. Fats and oils	13	2	12	28	94	14	2	12	30
11. Sugar and confectionery	48	3	39	122	91	52	6	40	126
12. Cakes and sweet biscuits	21	0	15	60	68	32	6	23	90
13. Non-alcoholic beverages	572	197	542	1,127	100	570	170	527	1,187
14. Alcoholic beverages	0	0	0	0	0	12	1	6	29
15. Condiments, spices, sauces and yeast	8	0	5	32	50	17	1	12	55
16. Soups and stocks	4	0	0	38	4	88	14	86	156
17. Miscellaneous	0	0	0	0	0	43	43	43	43
18. Savoury snacks	7	0	0	36	29	24	3	19	75
19. Ready meals	10	0	0	115	4	234	190	250	250

Table 5.1.b Consumption (main food groups) of Dutch children aged 4-8 years (DNFCS 2012-2014), weighted for socio-demographic characteristics, season and day of the week (n=296).

Food groups based on GloboDiet classification	Mean g/day	P5 g/day	Median g/day	P95 g/day	% Consumption days	On consumption days			
						Mean g/day	P5 g/day	Median g/day	P95 g/day
01. Potatoes and other tubers	50	0	40	131	53	96	29	73	226
02. Vegetables	73	0	60	181	79	93	13	77	240
03. Legumes	1	0	0	0	2	51	16	50	120
04. Fruits, nuts and seeds, olives	135	0	124	307	78	174	26	148	393
05. Dairy products and substitutes	386	92	362	770	97	399	51	370	816
06. Cereals and cereal products	147	67	141	246	99	147	48	135	289
07. Meat, meat products and substitutes	61	5	55	140	88	70	11	60	163
08. Fish, shellfish and amphibians	8	0	0	56	8	87	13	71	201
09. Eggs and egg products	8	0	0	45	20	38	4	45	90
10. Fats and oils	16	2	16	33	95	17	2	15	37
11. Sugar and confectionery	60	12	53	135	96	62	10	53	148
12. Cakes and sweet biscuits	35	0	32	88	74	49	10	38	124
13. Non-alcoholic beverages	796	399	788	1,364	99	804	333	761	1,429
14. Alcoholic beverages	0	0	0	0	0	2	1	1	4
15. Condiments, spices, sauces and yeast	17	0	11	58	60	29	3	22	81
16. Soups and stocks	6	0	0	51	5	129	19	101	380
17. Miscellaneous	0	0	0	0	0	9	9	9	9
18. Savoury snacks	13	0	5	58	33	39	6	25	110

Table 5.1.c Consumption (main food groups) of Dutch boys aged 9-18 years (DNFCS 2012-2014), weighted for socio-demographic characteristics, season and day of the week (n=259).

Food groups based on GloboDiet classification	Mean g/day	P5 g/day	Median g/day	P95 g/day	% Consumption days	On consumption days			
						Mean g/day	P5 g/day	Median g/day	P95 g/day
01. Potatoes and other tubers	79	0	72	206	49	162	62	143	308
02. Vegetables	90	0	71	259	78	117	12	98	300
03. Legumes	3	0	0	25	4	95	20	71	240
04. Fruits, nuts and seeds, olives	94	0	70	278	61	158	11	136	406
05. Dairy products and substitutes	396	46	364	908	93	424	38	393	987
06. Cereals and cereal products	224	84	201	424	99	226	70	199	468
07. Meat, meat products and substitutes	111	27	95	227	94	119	22	100	277
08. Fish, shellfish and amphibians	7	0	0	50	8	99	10	76	303
09. Eggs and egg products	10	0	0	45	22	45	4	45	135
10. Fats and oils	22	3	18	54	94	24	2	20	60
11. Sugar and confectionery	60	0	45	174	86	68	6	49	196
12. Cakes and sweet biscuits	47	0	34	140	67	69	10	50	182
13. Non-alcoholic beverages	1,307	632	1,198	2,443	100	1,314	523	1,200	2,663
14. Alcoholic beverages	51	0	0	280	5	1,150	250	587	5,040
15. Condiments, spices, sauces and yeast	34	0	25	109	72	48	4	35	148
16. Soups and stocks	12	0	0	93	6	209	62	183	570
17. Miscellaneous	2	0	0	0	1	284	30	61	773
18. Savoury snacks	32	0	15	120	37	84	12	59	213

Table 5.1.d Consumption (main food groups) of Dutch girls aged 9-18 years (DNFCS 2012-2014), weighted for socio-demographic characteristics, season and day of the week (n=273).

Food groups based on GloboDiet classification	Mean g/day	P5 g/day	Median g/day	P95 g/day	% Consumption days	On consumption days			
						Mean g/day	P5 g/day	Median g/day	P95 g/day
01. Potatoes and other tubers	73	0	70	205	54	134	37	138	269
02. Vegetables	84	0	75	202	78	107	15	98	231
03. Legumes	2	0	0	22	3	72	19	56	140
04. Fruits, nuts and seeds, olives	115	0	83	283	61	189	25	162	438
05. Dairy products and substitutes	305	26	255	751	91	332	27	270	863
06. Cereals and cereal products	171	65	168	305	99	173	45	155	343
07. Meat, meat products and substitutes	80	11	74	165	89	90	19	80	192
08. Fish, shellfish and amphibians	7	0	0	48	7	93	16	81	202
09. Eggs and egg products	11	0	0	50	24	45	6	45	100
10. Fats and oils	17	2	15	39	92	18	2	16	46
11. Sugar and confectionery	46	0	39	121	85	54	5	41	140
12. Cakes and sweet biscuits	43	0	35	111	70	61	10	45	154
13. Non-alcoholic beverages	1,202	567	1,111	2,160	100	1,204	487	1,113	2,367
14. Alcoholic beverages	8	0	0	2	3	280	0	167	1,626
15. Condiments, spices, sauces and yeast	27	0	22	76	72	38	5	28	107
16. Soups and stocks	13	0	0	101	8	171	28	175	347
17. Miscellaneous	2	0	0	0	0	472	412	412	541
18. Savoury snacks	23	0	13	82	38	61	11	48	173

Table 5.1.e Consumption (main food groups) of Dutch men aged 19-50 years (DNFCS 2012-2014), weighted for socio-demographic characteristics, season and day of the week (n=273).

Food groups based on GloboDiet classification	Mean g/day	P5 g/day	Median g/day	P95 g/day	% Consumption days	On consumption days			
						Mean g/day	P5 g/day	Median g/day	P95 g/day
01. Potatoes and other tubers	84	0	67	236	49	174	37	150	362
02. Vegetables	131	24	115	304	90	145	26	124	332
03. Legumes	3	0	0	37	4	92	18	101	200
04. Fruits, nuts and seeds, olives	97	0	63	319	59	163	13	137	374
05. Dairy products and substitutes	351	16	296	854	90	385	34	317	954
06. Cereals and cereal products	250	88	248	424	97	258	70	245	500
07. Meat, meat products and substitutes	131	32	116	287	94	141	32	117	331
08. Fish, shellfish and amphibians	14	0	0	79	11	127	25	100	280
09. Eggs and egg products	10	0	0	50	19	56	7	45	135
10. Fats and oils	28	4	26	63	96	29	4	24	72
11. Sugar and confectionery	43	0	33	112	79	56	5	42	153
12. Cakes and sweet biscuits	40	0	28	139	52	77	14	58	214
13. Non-alcoholic beverages	1,909	817	1,796	3,277	100	1,911	725	1,748	3,570
14. Alcoholic beverages	312	0	75	1,350	41	774	63	500	2,333
15. Condiments, spices, sauces and yeast	54	2	40	135	80	68	8	46	208
16. Soups and stocks	18	0	0	108	11	178	20	180	351
17. Miscellaneous	3	0	0	0	1	175	28	125	292
18. Savoury snacks	33	0	13	113	41	82	10	63	220



Table 5.1.f Consumption (main food groups) of Dutch women aged 19-50 years (DNFCS 2012-2014), weighted for socio-demographic characteristics, season and day of the week (n=259).

Food groups based on GloboDiet classification	Mean g/day	P5 g/day	Median g/day	P95 g/day	% Consumption days	On consumption days			
						Mean g/day	P5 g/day	Median g/day	P95 g/day
01. Potatoes and other tubers	63	0	60	194	44	141	50	140	276
02. Vegetables	128	9	121	274	87	149	21	124	345
03. Legumes	4	0	0	25	4	90	12	67	358
04. Fruits, nuts and seeds, olives	115	0	75	382	60	191	17	149	494
05. Dairy products and substitutes	337	27	299	799	93	362	31	306	898
06. Cereals and cereal products	179	50	179	313	98	184	50	175	350
07. Meat, meat products and substitutes	88	0	79	177	86	101	16	86	235
08. Fish, shellfish and amphibians	14	0	0	87	14	99	10	100	240
09. Eggs and egg products	10	0	0	52	23	43	4	45	100
10. Fats and oils	18	1	16	40	92	19	3	17	45
11. Sugar and confectionery	31	0	23	93	72	43	4	31	134
12. Cakes and sweet biscuits	33	0	26	89	57	58	10	43	144
13. Non-alcoholic beverages	2,035	1,032	1,847	3,569	100	2,039	933	1,860	3,660
14. Alcoholic beverages	61	0	0	343	17	365	40	300	900
15. Condiments, spices, sauces and yeast	36	0	27	101	73	50	3	36	143
16. Soups and stocks	24	0	0	133	13	182	48	179	304
17. Miscellaneous	5	0	0	0	2	295	30	258	515
18. Savoury snacks	16	0	0	70	27	62	10	42	180

Table 5.1.g Consumption (main food groups) of Dutch men aged 51-79 years (DNFCS 2012-2014), weighted for socio-demographic characteristics, season and day of the week (n=281).

Food groups based on GloboDiet classification	Mean g/day	P5 g/day	Median g/day	P95 g/day	Consumption days %	On consumption days			
						Mean g/day	P5 g/day	Median g/day	P95 g/day
01. Potatoes and other tubers	94	0	73	240	56	171	68	143	308
02. Vegetables	148	21	126	304	88	167	27	152	375
03. Legumes	5	0	0	50	4	139	61	120	230
04. Fruits, nuts and seeds, olives	134	0	97	379	67	194	16	165	435
05. Dairy products and substitutes	387	58	361	875	96	404	40	354	892
06. Cereals and cereal products	208	91	189	374	98	209	67	179	459
07. Meat, meat products and substitutes	122	39	110	226	95	127	22	113	280
08. Fish, shellfish and amphibians	19	0	0	100	16	119	15	100	280
09. Eggs and egg products	19	0	6	68	33	59	10	50	135
10. Fats and oils	28	5	25	61	96	30	6	27	63
11. Sugar and confectionery	32	0	23	97	73	43	5	31	110
12. Cakes and sweet biscuits	47	0	35	141	69	68	10	49	205
13. Non-alcoholic beverages	1,662	728	1,572	3,178	100	1,663	637	1,555	3,153
14. Alcoholic beverages	267	0	165	865	56	480	48	363	1,070
15. Condiments, spices, sauces and yeast	39	0	33	106	77	50	4	36	147
16. Soups and stocks	37	0	0	176	18	196	28	190	351
17. Miscellaneous	3	0	0	0	1	288	4	292	515
18. Savoury snacks	15	0	0	72	24	65	10	59	150

*Table 5.1.h Consumption (main food groups) of Dutch women aged 51-79 years (DNFCS 2012-2014), weighted for socio-demographic characteristics, season and day of the week (n=234).*

Food groups based on GloboDiet classification	Mean g/day	P5 g/day	Median g/day	P95 g/day	% Consumption days	On consumption days			
						Mean g/day	P5 g/day	Median g/day	P95 g/day
01. Potatoes and other tubers	63	0	60	167	48	131	41	138	245
02. Vegetables	159	31	139	366	89	178	33	158	413
03. Legumes	8	0	0	76	7	117	22	101	225
04. Fruits, nuts and seeds, olives	156	0	118	435	76	205	20	154	497
05. Dairy products and substitutes	333	51	313	748	97	349	42	307	738
06. Cereals and cereal products	140	35	130	266	97	144	35	130	305
07. Meat, meat products and substitutes	84	0	82	185	85	100	19	86	230
08. Fish, shellfish and amphibians	24	0	0	131	19	125	11	100	312
09. Eggs and egg products	12	0	0	45	23	53	10	50	100
10. Fats and oils	20	4	18	41	94	22	3	18	52
11. Sugar and confectionery	28	0	17	88	65	41	4	25	115
12. Cakes and sweet biscuits	40	0	32	101	70	59	12	45	150
13. Non-alcoholic beverages	2,010	853	1,884	3,078	100	2,018	793	1,911	3,439
14. Alcoholic beverages	98	0	0	450	38	250	50	200	600
15. Condiments, spices, sauces and yeast	30	0	22	78	74	41	2	26	122
16. Soups and stocks	37	0	0	247	16	224	73	180	524
17. Miscellaneous	10	0	0	0	3	267	19	258	515
18. Savoury snacks	12	0	0	63	20	58	6	40	154

### 5.2.2 Consumption days

Not of all food groups was eaten by all participants during the survey on one or both recall days. The percentage of consumption days that a food group was consumed is also given in Tables 5.1 and 5.1.a-h; in Appendix B Tables 5.1 and 5.1.a-h consumption data of food subgroups are given. Figure 5.3 shows the number of days of the consumption of food groups for the total population, 1-79 year. This information by age-gender group as the percentages of consumption days is presented in Figure 5.4.

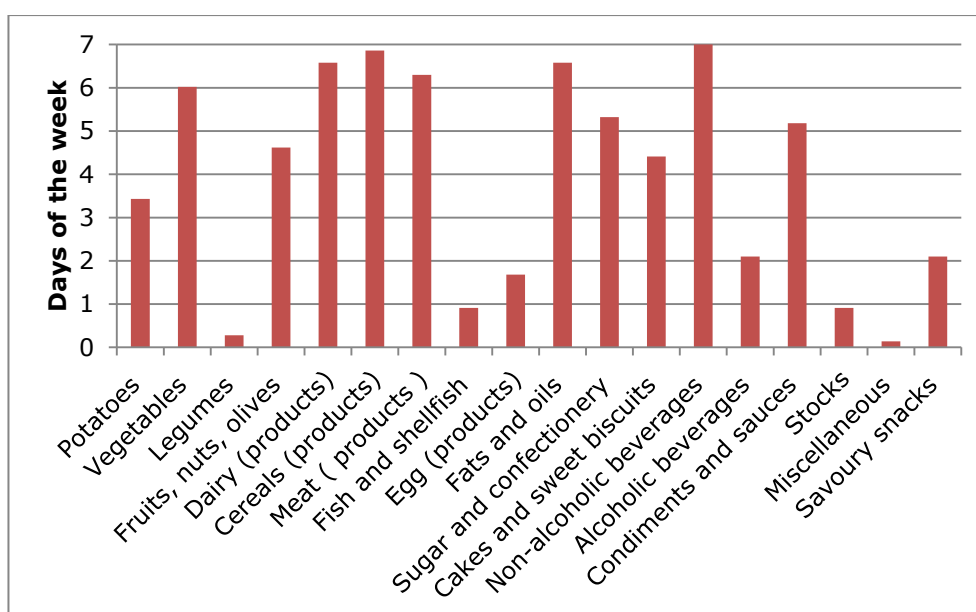


Figure 5.3 Mean percentage of consumption days as number of days per week, that a food group was consumed by the Dutch population (DNFCS 2012-2014;  $n = 2,237$ ), weighted for socio-demographic characteristics, season and day of the week.

Food groups that were consumed on average on more than 85% of the days (approximately six days a week) by almost all age-gender groups were: 'Non-alcoholic beverages', 'Cereal (products)', 'Dairy (products)', 'Fats and oils', 'Meat (products)' and 'Vegetables'.

The youngest children consumed 'Fruits, nuts and olives' on more than six days a week (89% consumption days); 4-8 year-olds and women above 50 eat 'Fruits, nuts and olives' on more than five days a week (consumption on 76% of the days); for other age-sex groups this was about four days a week (ca. 67%).

'Potatoes' are only consumed on about half of the days. Food groups with the least frequency of daily consumptions were 'Legumes' (4% consumption days) and both 'Stocks' and 'Fish and shellfish' (13% consumption days).

Food groups that were consumed more often by the male adult population compared to the female adult population were:

- 'Alcoholic beverages': on about 20% more consumption days;
- 'Potatoes': about 5-8% more consumption days;

- 'Meat (products)': about 8-10% more consumption days, also seen among adolescents;
- 'Sugar and confectionary': 7-8% more consumption days;
- 'Condiments and sauces': only for 19 to 50 year-olds about 7% more consumption days;
- 'Savoury snacks': about 14% more consumption days, only for 19 to 50 year-olds.

Food group 'Fruits, nuts and olives' was more often consumed by women aged 51 to 79 year-old compared to men in the same age range (67% versus 76%).

For most food groups we observed an increase by age in the percentage of consumption days. In particular for:

- 'Vegetables': on 73% of the days by 1 to 3 year-olds to 90% by 51 to 79 year-olds);
- 'Fish and shellfish': on about 8% of the days by children and adolescents to 16-19 % by 50+ group;
- 'Alcoholic beverages': 0% by children to 56% by 51 to 79 year-old men and 38% by 51 to 79 year-old women;
- 'Condiments and sauces': lowest frequency (50%) by the youngest age group, highest (80%) by 19 to 50 year-old men;
- 'Stocks': 4% by young children to 23% by 51 to 79 year-old women.

A decrease by age in the percentage of consumption days was observed for 'Sugar and confectionary': more than 90% by young children to 65% by 51 to 79 year-old women.

The percentage of days that 'Savoury snacks' were consumed showed an increase from young children (29%) to a 'peak' of 41% for 19-50 year old men and a decrease to 20% for women 51-79 years old.

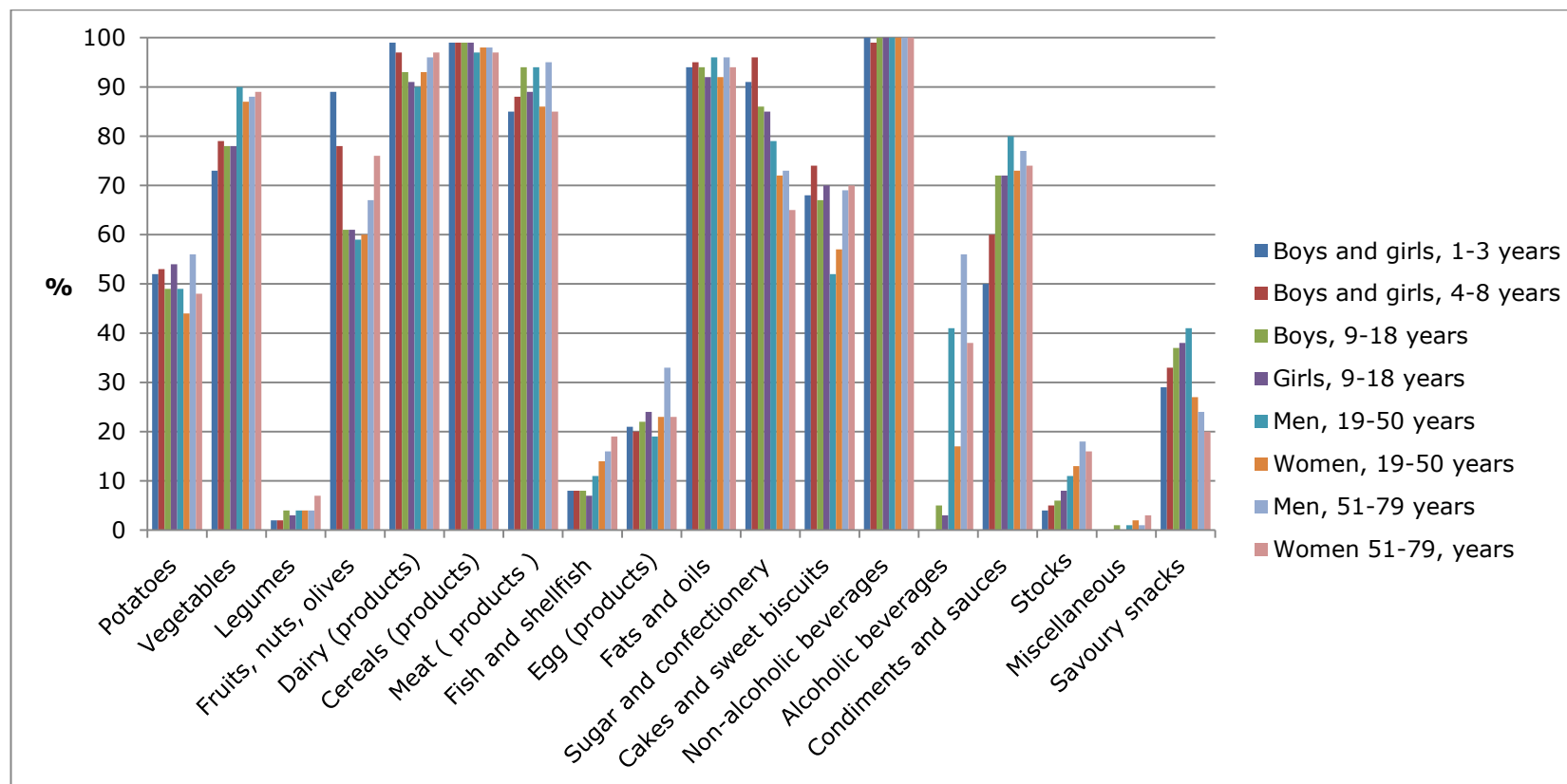


Figure 5.4 Percentage of consumption days that a food group was consumed by the Dutch population stratified by age-gender groups (DNFCS 2012-2014; n= 2,237), weighted for socio-demographic characteristics, season and day of the week.

### 5.3 Consumption by moments and by place of consumption

#### 5.3.1

##### *Consumption moments*

Figure 5.5 and Appendix B Table 5.2 show, for food groups of the total population, how the total consumption in grams per day of the main food groups was distributed over the consumption moments. Dinner was the most important moment of consumption for 'Potatoes' (92%), 'Vegetables' (85%), 'Legumes' (81%), 'Meat (products)' (72%), 'Fish and shellfish' (66%), 'Egg (products)' (49%), 'Fats and Oils' (46%), 'Condiment and sauces' (75%) and 'Stocks' (50%). There were small variations across the age-gender groups (see Appendix B Tables 5.2.a-d and Figure 5.6).

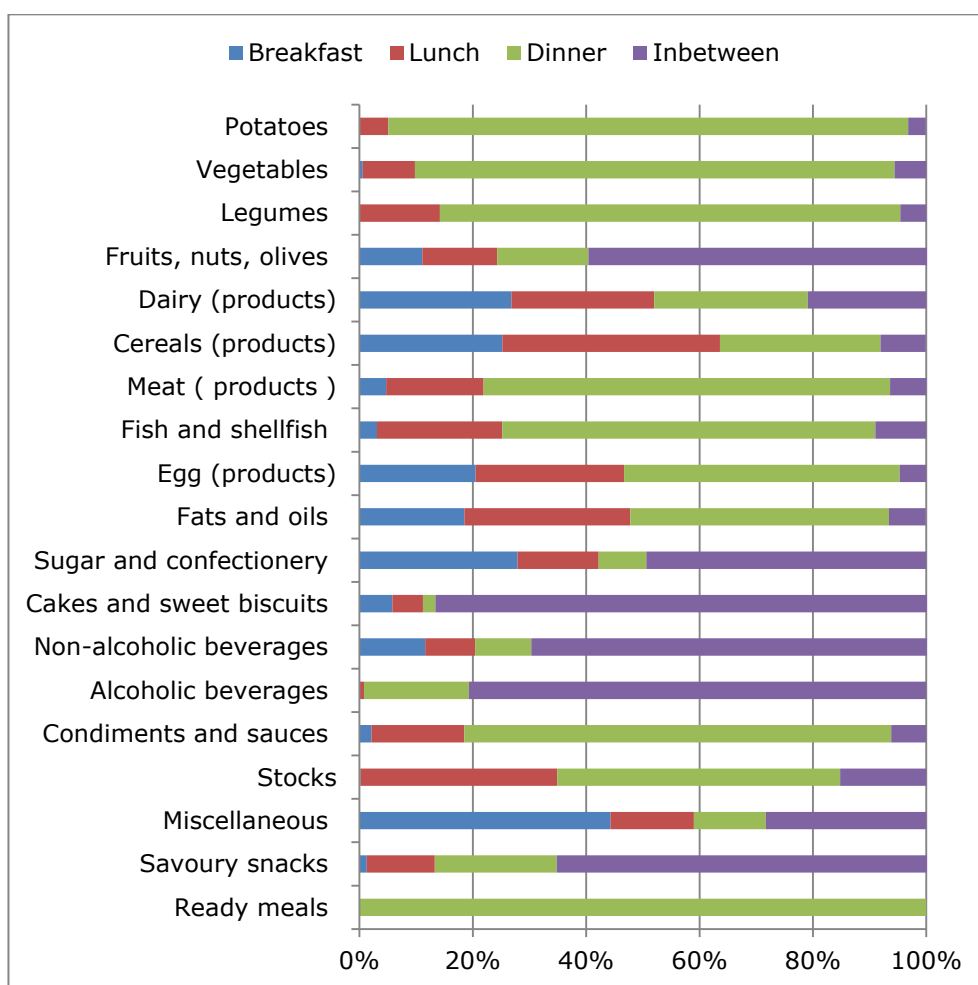


Figure 5.5 Average contribution of consumption moments to total food group consumption of the Dutch population (DNFCS 2012-2014;  $n = 2,237$ ), weighted for socio-demographic characteristics, season and day of the week.

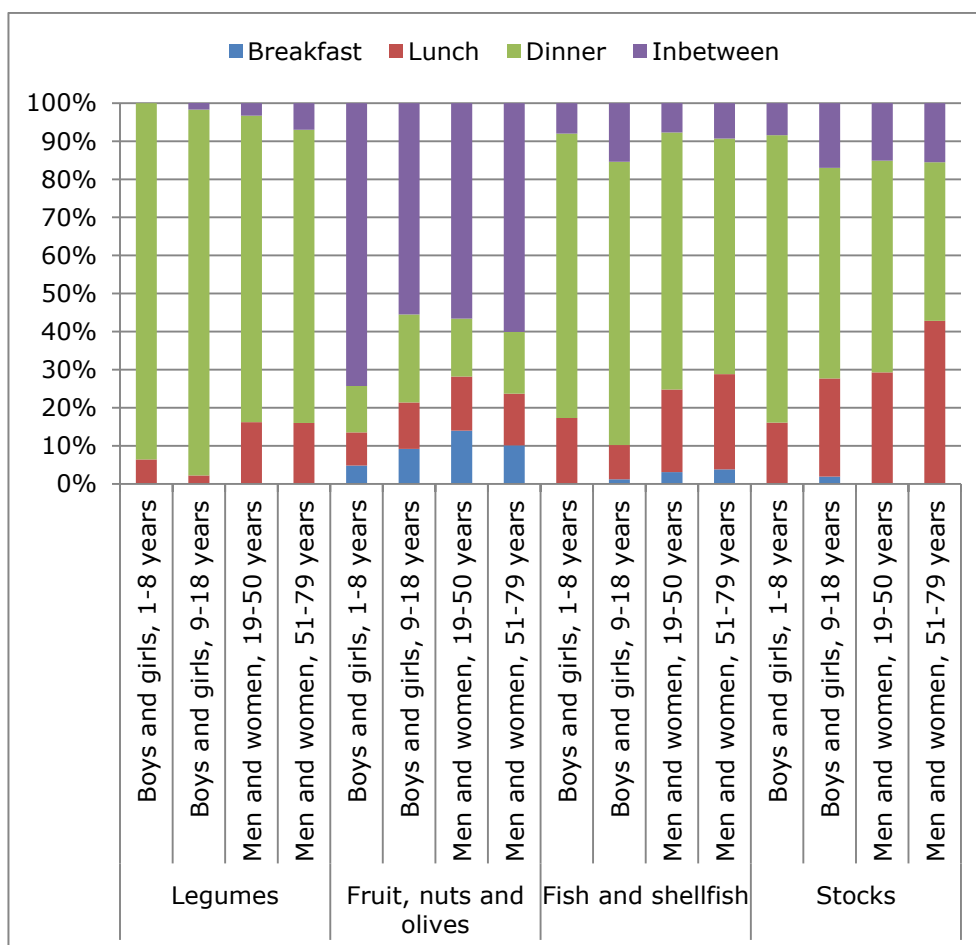


Figure 5.6 Average contribution of moment of consumption of some selected food groups to total food group consumption of the Dutch population (DNFCS 2012-2014;  $n = 2,237$ ) stratified by age-gender groups, weighted for socio-demographic characteristics, season and day of the week.

The contribution of some food groups to the consumption moments by age-gender groups differed. Food groups for which the difference exceeded 15% are illustrated in Figure 5.6. The proportion of 'Legumes', 'Stocks' and 'Fish and shellfish' consumed during Dinner was at least 15% lower in the older adults compared to the younger generations, as relatively more was consumed during Lunch in the older age groups (see Figure 5.6). 'Fruits, nuts and olives' (60%), 'Cakes and sweet biscuits' (87%), 'Beverages' (70% Non-alcoholic and 81% Alcoholic beverages) and 'Savoury snacks' (65%) were mostly consumed In between meals. The youngest children consumed the largest proportion of 'Fruits, nuts and olives' In between meals (see Appendix B Tables 5.2.a-d). No differences were observed in proportion of 'Sugar and confectionary' consumed in between meals by age. Lunch provided most 'Cereal (products)' (38%). Finally, consumption of 'Dairy (products)' was equally distributed over the various consumption moments.



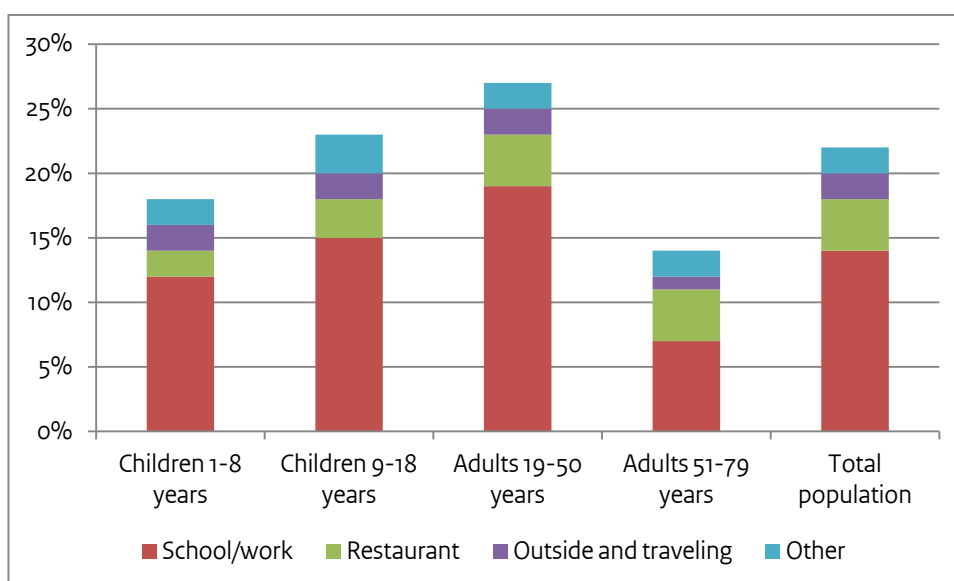


Figure 5.7 Average contribution of place of consumption to total food consumption of the Dutch population (DNFCS 2012-2014;  $n = 2,237$ ) stratified by age-gender groups, weighted for socio-demographic characteristics, season and day of the week.

### 5.3.2 Place of consumption

Figure 5.7 shows the percentage of the consumption outdoors for four age groups. The Dutch consumed 22% of the foods and drinks at home. Adolescents and adults consume relatively more food and drinks at school or at work (15 and 19%), older adults more at home (85%).

Figure 5.8 and appendix B Table 5.3 shows the consumption of food groups of the total population by place of consumption. For all main food groups, more than 70% was consumed at home. The food groups most frequently consumed away from home were 'Cakes and sweet biscuits', 'Fruits, nuts and olives', 'Stocks', 'Fish and Shellfish', 'Non-alcoholic beverages', 'Alcoholic beverages' and 'Miscellaneous'.

Appendix B Tables 5.3.a-d and Figure 5.9 show the differences in the contribution by place of consumption for four age groups. Only age differences larger than 15% were displayed in Figure 5.9. It shows differences due to the life stage. For example, relatively more 'Fruits, nuts and olives', 'Cakes and sweet biscuits' were consumed at school or at work. Additionally, relatively more 'Fish and shellfish' and 'Stocks' were consumed by the adults in a restaurant.

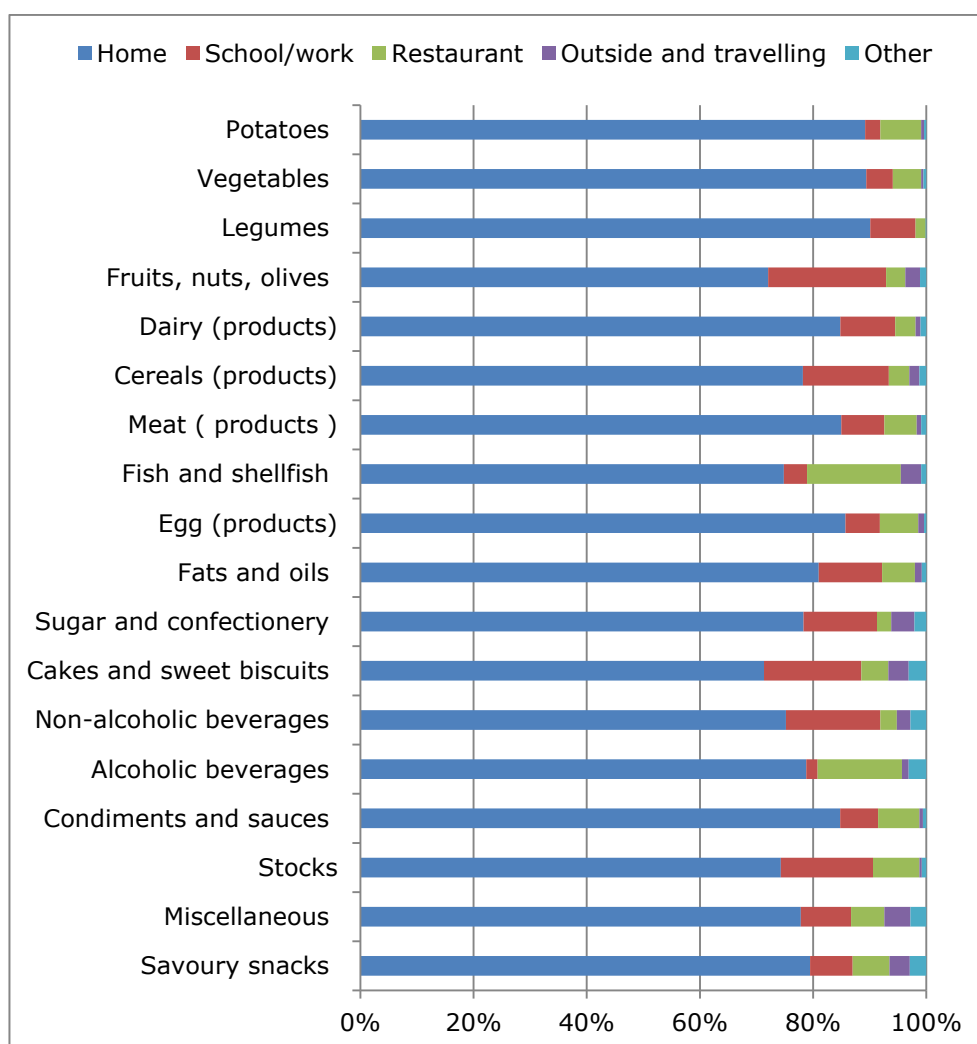


Figure 5.8 Average contribution of place of consumption to total food group consumption of the Dutch population (DNFCS 2012-2014;  $n = 2,237$ ), weighted for socio-demographic characteristics, season and day of the week.

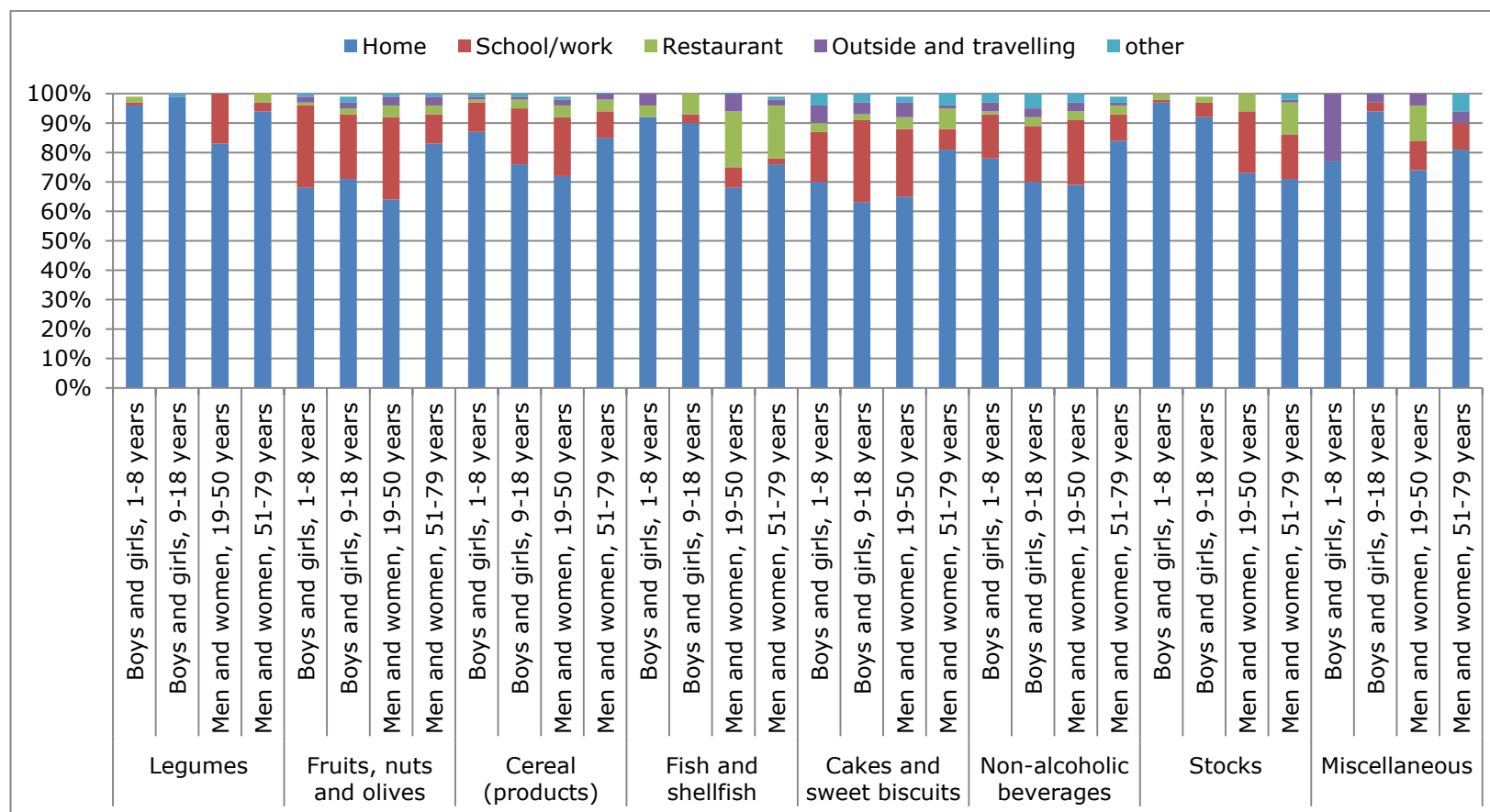


Figure 5.9 Average contribution of place of consumption of some selected food groups to total food group consumption of the Dutch population (DNFCS 2012-2014;  $n = 2,237$ ) stratified by age-gender groups, weighted for socio-demographic characteristics, season and day of the week.

## 5.4 Comparison with previous survey

The consumption data in this report concerns the observed dietary intake in the Netherlands in the years 2012-2014. Changes in consumption with approximately 5 years earlier were studied by comparing the results to those of DNFCs-2007-2010, using corresponding age-gender groups.<sup>19</sup>

Table 5.2 shows the mean consumption of food classified according to GloboDiet food groups in 2007-2010 (2010 in header) and 2012-2014 (2014 in header). Results are given for the 9 to 18, 19 to 50 and 51 to 69 year-olds as well as the total population aged 6 to 69 years. Figure 5.10 and appendix Table 5.4 show the differences in consumption between 2010 and 2014 for the 9 to 69 year-olds in total. A decrease of more than 10% in consumption was observed in most age groups for 'Potatoes', 'Fats and oils', 'Alcoholic beverages' and 'Dairy products'. A small trend towards a decrease in 'Meat (products)' and 'Cakes and biscuits' was seen. Especially in the adult age groups an increase was observed for 'Condiments and sauces' and for 'Non-alcoholic beverages'. The latter increase was mainly due to increased consumption of tea, coffee and water (data not shown). In the 5 year period, the consumption of 'Fruits, nuts and olives' increased in children and adolescents but not in adults (see Figure 5.11).

Consumption of 'Vegetables', 'Cereal (products)', 'Sugar and confectionary' and 'Savoury snacks' was similar in both surveys. Whereas for some other food groups, for instance for 'Fish and Shellfish', 'Egg (products)' and 'Legumes' the consumed amounts were too small to identify changes in the 5 year period.

Apart from time differences in the mean intakes of food groups, it is also interesting to compare the percentages of consumption days by food groups. In general, the percentages of consumption days of various food groups were similar in 2007-2010 and 2012-2014. More detailed analyses regarding changes in consumption over time will be conducted after finalization of data collection and data processing of the whole 2012-2016 food consumption survey. This will include differences in consumption by places of consumption and meal moments.

Table 5.2 Mean consumption (main food groups) of the Dutch population stratified by age-gender groups in DNFCs 2007-2010 (column 2010) and DNFCs 2012-2014 (column 2014).

Food groups based on GloboDiet classification	Boys, 9-18 years		Girls, 9-18 years		Men, 19-50 years		Women, 19-50 years		Men, 51-69 years		Women, 51-69 years	
	2010 n=703 mean g/day	2014 n=259 mean g/day	2010 n=706 mean g/day	2014 n=273 mean g/day	2010 n=704 mean g/day	2014 n=273 mean g/day	2010 n=698 mean g/day	2014 n=259 mean g/day	2010 n=351 mean g/day	2014 n=141 mean g/day	2010 n=353 mean g/day	2014 n=118 mean g/day
Potatoes	99	79	79	73	113	84	71	63	107	91	80	62
Vegetables	91	90	84	84	136	131	128	128	146	142	156	156
Legumes	3	3	2	2	5	3	4	4	7	4	3	7
Fruits, nuts, olives	81	94	93	115	101	97	115	115	126	129	153	148
Dairy (products)	449	396	381	305	422	351	350	337	431	388	363	335
Cereal (products)	213	224	171	171	241	250	183	179	204	216	158	140
Meat (products)	111	111	88	80	138	131	92	88	136	123	93	86
Fish and shellfish	8	7	6	7	17	14	14	14	20	19	20	25
Egg (products)	9	10	8	11	13	10	11	10	14	19	14	11
Fats and oils	26	22	20	17	33	28	22	18	33	29	24	20
Sugar and confectionery	58	60	48	46	43	43	33	31	31	31	25	27
Cakes and sweet biscuits	50	47	47	43	41	40	42	33	45	47	42	39
Non-alcoholic beverages	1,216	1,307	1,173	1,202	1,800	1,909	1,932	2,035	1,530	1,714	1,798	2,084
Alcoholic beverages	65	51	25	8	334	312	80	61	320	271	140	99

Food groups based on GloboDiet classify- cation	Boys, 9-18 years		Girls, 9-18 years		Men, 19-50 years		Women, 19-50 years		Men, 51-69 years		Women, 51-69 years	
	2010 n=703	2014 n=259	2010 n=706	2014 n=273	2010 n=704	2014 n=273	2010 n=698	2014 n=259	2010 n=351	2014 n=141	2010 n=353	2014 n=118
	mean g/day	mean g/day	mean g/day	mean g/day	mean g/day	mean g/day	mean g/day	mean g/day	mean g/day	mean g/day	mean g/day	mean g/day
Condiments and sauces	34	34	27	27	44	54	30	36	30	39	25	31
Stocks	17	12	16	13	28	18	25	24	41	35	33	39
Miscellaneous	0	2	2	2	2	3	4	5	1	3	4	12
Savoury snacks	33	32	25	23	25	33	21	16	16	16	9	13

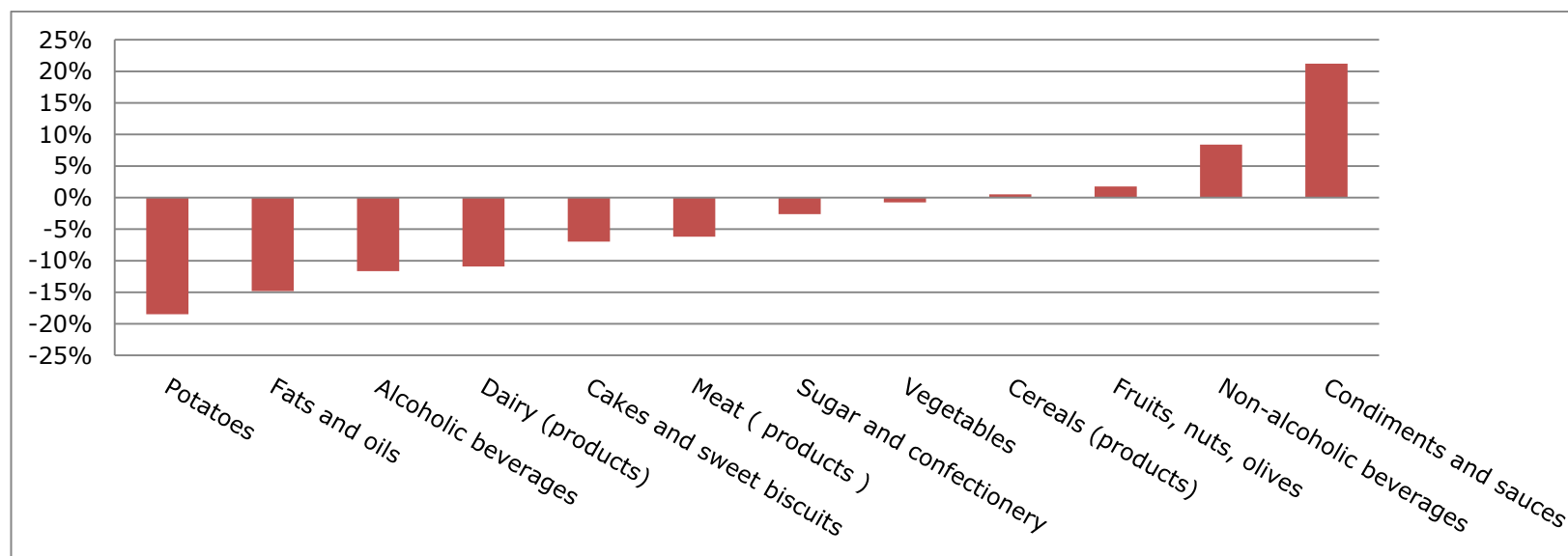


Figure 5.10 Changes in mean consumption (main food groups) of the Dutch population aged 9-69 years (Decrease or increase of consumption in DNFCs 2012-2014 in % compared to that in DNFCs 2007-2010), weighted for socio-demographic characteristics, season and day of the week.

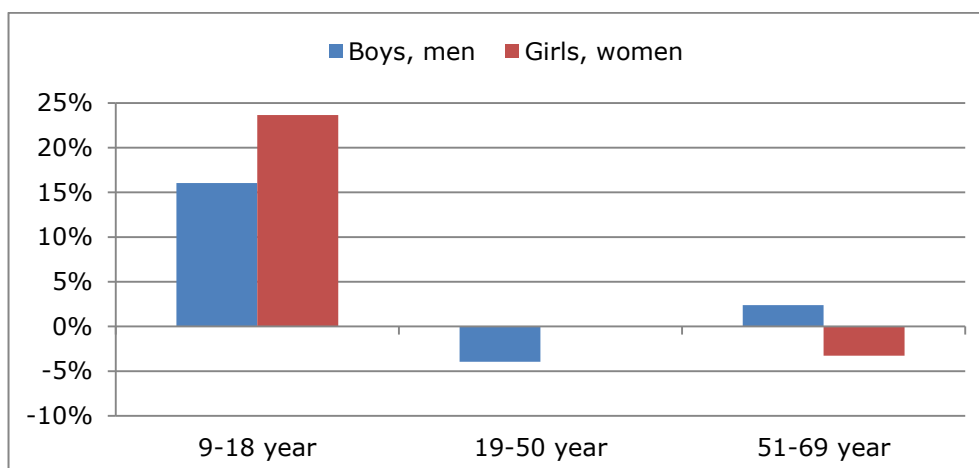


Figure 5.11 Changes in mean consumption of 'Fruit' of the Dutch population stratified by age-gender groups (Decrease or increase of consumption in DNFCS 2012-2014 in % compared to that in DNFCS 2007-2010), weighted for socio-demographic characteristics, season and day of the week.



## 6 Discussion

### 6.1 Introduction

In the previous chapters the results of the first two years of data collection (2012-2014) of the ongoing survey on food consumption of the Dutch population (DNFCS 2012-2016, 1-79 years) have been set out. In this chapter, the findings are collectively addressed. Furthermore, some general methodological issues are discussed. Finally, conclusions are drawn.

### 6.2 Main findings

#### *Foods*

- Dutch persons (1-79 years of age) consumed on average a total of 3 kg drinks and foods per day. Almost 2 kg of this concerned beverages such as tea, coffee, water, soft drinks, juices and alcohol. Approximately 40% of the remaining foods including dairy beverages was of animal origin.
- Boys and men aged 9 to 50 years consumed more than girls and women in these age groups. In older age groups difference between men and women were smaller. What is eaten differed little between the groups. Compared to adults, children consumed relatively more milk and vegetables and they drank less beverages.
- Not all foods and drinks were consumed daily. Potatoes were eaten at 50% of the days, fruit on almost five days and vegetables on six days a week. Fish was consumed on average on one day and meat on more than six days a week. The Dutch population rarely consumed legumes.

#### *Changes compared to DNFCS 2007-2010*

- Compared to the previous DNFCS, the consumption of potatoes, fats and oils, alcoholic beverages, dairy products, cakes and biscuits and meat (products) decreased and the consumption of non-alcoholic beverages and condiments and sauces increased.
- The consumption of vegetables and cereal (products) remained stable.
- Children and adolescents consumed more fruit than about five years ago. This increase was not observed in the adult age groups.

#### *Place and time of consumption*

- Consumption of foods and drinks was spread throughout the whole day, but mainly used during the main meals. In between the meals especially cakes and biscuits, alcoholic and non-alcoholic beverages, savoury snacks and fruit were consumed.
- Not all participants used a breakfast or lunch daily, but most children aged 1 to 8 years did. Of the adult respondents about one out of ten had no breakfast and one out of five had no lunch.
- Most people started their breakfast between 7:30 and 9:00 hour, lunch between 12:00 and 13:00 and dinner between 17:30 and 19:00 hour.

- The Dutch consumed 80% of the foods and drinks at home. Foods that were often eaten outdoors were cakes and biscuits, fruit and fish. Alcoholic beverages and fish were often consumed in restaurants. Adolescents and adults consumed relatively more food and drinks at school or at work (15 and 19 percent), older adults more at home (85 percent).

#### *Other dietary characteristics*

- Dieting (such as a diet with restricted energy or fat or a diet for diabetics) was common in the older age groups. One fifth of the women over the age of 50 years reported being on a special diet.
- Depending on the age group, 17 to 41% indicated not to use discretionary salt. This percentage was the lowest among the 1 to 3 year-olds. It was very common to add salt during preparation of the meal (52 to 73%). Just to add salt at the table the percentage was lower (10 to 29%).
- The use of dietary supplements was fairly common in the Dutch population, especially in young children and female adults (about 50%). The most commonly taken dietary supplements in all age groups were multivitamins/minerals. This use was comparable with the previous survey in 2007-2010.
- 70% of children under the age of 4, about 48% of women of 50 years and older and 20% of men of 70 years and older complied with the recommendation to take vitamin D supplementation.

## **6.3 Methodological aspects**

### **6.3.1 *Response and representativeness***

The overall preliminary response of the survey was 61% and varied across the age groups between 51 and 73%. We expect that at the end of the whole four year survey (DNFCS 2012-2016) the response will increase, as for 14% of the current invitees the data collection was still incomplete. The final response will probably be comparable to the previous food consumption survey (69%).

Participants were drawn from market research panels. This has the advantage that basic socio-demographic information of the individual participants is available. Recruitment of participants can be conducted efficiently and representativeness with regard to socio-demographic characteristics can be monitored if needed. In this survey, the recruitment was steered with regard to age, gender, educational level, region and urbanisation in order to get a study population, which is representative within each age-gender group for the Dutch population. Small deviations in the distribution of these factors and the differences in age, compared to the national population numbers in the Netherlands at January 2014, were taken into account in the weighting factor. Data used in this report were collected over a period of two years, spread over all seasons and days of the week. Also for these factors, small deviations were taken into account in the weighting factor.

Based on the comparison of the lifestyle characteristics with figures of the Lifestyle Monitor,<sup>18</sup> we observed some differences. Obesity was more prevalent in the current survey, compliance with the physical activity guideline seems to be higher, smoking was comparable. The results on

non-drinkers of alcohol were comparable for the adolescents and higher for the adults. Based on the current findings it is not possible to conclude in which direction this potential selection bias could have affected the results.

Especially in the group of women aged 51 to 70 years the impact of potential selection bias could have been larger, as obesity was more prevalent in this age group compared to that in other studies. On the one hand, it is possible that the observed food consumption might be underestimated as the percentages of underreporting is known to be associated with BMI. On the other hand, the food consumption of this age-gender group might be overestimated as more obese persons with a higher food intake were included. However, also for this age group it is not yet possible to estimate the impact of this bias. After finishing the whole survey, with more data per subgroup, it should be possible to look in more detail to these differences.

Pregnant and lactating women were excluded from the study population. A specific food consumption survey needs to be carried out to assess the dietary intake of these groups. In addition, the current survey cannot be used to describe the consumption by specific immigrant groups. In order to be representative for the whole Dutch population we tried to have at least 5% immigrants of non-western countries in our study population. However, with this percentage this subgroup is still slightly underrepresented.

### 6.3.2 *Method of dietary assessment*

This study followed the guidelines of EFSA for conducting a national food consumption survey in the view of a pan-European dietary survey.<sup>23</sup>

An advantage of the GloboDiet 24-hour dietary recall method is that a great level of detail is gathered and systematically stored; this makes the results suitable for a great range of research questions and for underpinning policy measures, not only at the national level but also for research on nutritional and safety issues at European level.

Another advantage of the current survey is that the survey included a broader age range (1-79 years) compared to the previous core survey in 2007-2010 (7-69 years); all age groups are studied over the whole two year period of time and conducted with the same version of the GloboDiet program. However, self-reported dietary assessment is never without errors<sup>24</sup> and the method differed across the age-gender groups on some details, mainly because of practical reasons, in order to improve the quality of the data. Differences were, for instance, combination of the 24-hour recalls with a food diary for the youngest and oldest age groups, and face-2-face interviews besides interviews by phone. It was expected that the combination with the food diaries would increase the quality of the dietary assessment, although this might have been counteracted by the possibility that participants changed their dietary habits because of keeping the food diary.<sup>25</sup> We assume that the impact of the method does not explain the differences by age groups.

Various quality checks and systematical quality controls on interviewers and collected dietary data were conducted during the fieldwork and data handling, in order to improve the quality of the interviewers and the

collected data. For instance by audio taped interviews and interview exercises, differences in reported items by interviews were calculated. Based on these findings the interviewers got personal feedback. In general, the findings of these controls did not indicate that the quality of the collected data was inadequate. However, it is still possible that misreporting, underreporting or over reporting occurred. In our previous Dutch national food consumption survey the expected ratio of the energy intake and energy requirements of the study population was 1.74, while the mean observed ratio was 1.46. For the current two year data collection, nutrient calculation could not yet be carried out. After finishing of the whole data collection and linkage with the food composition database, it is possible to estimate underreporting in this survey. There is no indication that this will differ so much from the previous survey.

As since 2003, the Dutch food consumption surveys use GloboDiet, it is possible to make a comparison with the previous surveys. Nevertheless, small changes in the methodology were implemented. For the comparison with the previous survey the food consumption data of DNFCs 2007-2010 was converted into the current food group classification in order to make a correct comparison.

#### **6.4 Interim report**

In this report we describe the initial results halfway through the data collection of the food consumption survey 2012-2016, by age and gender groups. Insight in the food consumption of other subpopulations will be addressed based on the complete data collection of 2012-2016. In this report no evaluation of the nutrient adequacy of the diet is made yet, as the data is not yet fully linked to the food composition database. This will be done based on the complete data collection of 2012-2016.

It is outside the scope of this report to compare the Dutch diet with the recent food based dietary guidelines.<sup>26, 27</sup> For the current consumption data this will be published in 2017, and after finalization of the four years of data collection for the total study results (publication expected autumn 2018).

#### **6.5 Conclusions**

This study based on DNFCs-2012-2014 provides initial insight into the amount of foods and drinks consumed, into the consumption by place and by moment and into the changes in the consumption of selected food (groups) of the Dutch population since the previous survey in 2007-2010. It was carried out among more than two thousand children and adults in the Netherlands.

Dutch persons (1-79 years of age) consume on average a total of 3 kg drinks and foods per day. Almost 2 kg of this concerns beverages (other than dairy beverages) such as tea, coffee, water, soft drinks, juices and alcohol. Approximately 40% of the remaining foods including dairy is of animal origin.

The consumption differs by age and gender; boys and men consume more than girls and women and the total consumed amount of food

increases by age. What is eaten differs little between the groups. Children consume relatively more milk and fruit than adults and they drink less beverages. Cereals and bread and meat are popular food groups, they are consumed almost daily (six to seven days a week). Fish and legumes are consumed less (one day a week or less).

Dutch men consume most of their foods at home (80%). They eat throughout the whole day and evening and generally use three main meals a day. Most people eat breakfast between 7:30 and 9:00 hour, lunch between 12:00 and 13:00 hour and an evening meal around 18:00 hour. Foods that are often eaten outdoors are cakes and biscuits, fruit and fish. Alcoholic beverages and fish are often consumed in restaurants. Adolescents and adults consume relatively more food and drinks at school or at work (15 and 19 percent), older adults more at home (85 percent).

We conclude that fruit consumption among children increased (20%) during the last five years. In the whole population, the consumption of potatoes, fats and oils, alcoholic beverages, dairy products, cakes and biscuits and meat (products) decreased. The consumption of vegetables and bread remained stable and the consumption of non-alcoholic beverages slightly increased.

These data are part of the total study which runs up to 2017. The results for the entire period and the significance for health issues will be published after finalization of the four years of data collection (expected 2018).



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## Acknowledgement

We wish to thank several people for their contribution to this project: the respondents (and for the young participants also their parents/carers) for participating in the survey, all interviewers for performing the fieldwork, the project team from Kantar (former TNS Nipo) for the logistics in data collection, the team from the International Agency for Research on Cancer for the GloboDiet updates, the expert committee for their advices, and our colleagues in RIVM for their contribution to the design, preparation, fieldwork, data handling and dissemination of this report.



## Appendix A      List of experts

### *Client:*

Drs. E.N. Blok (until June 2013)  
Drs. H.H. Klerken-Cox (from January 2014)

### *Members of expert-panel:*

Dr. P.E. Boon (until 2014)  
Dr. J.J.M. Castenmiller  
Dr. M.C.J.M. van Dongen  
Ir. A. Kruizinga  
Dr. C.J. Spaaij (until March 2007)  
Prof. Dr. P. van 't Veer (chairman)  
Dr. J.H.M. de Vries  
Dr. A.M. Werkman (until June 2013)  
Dr. L. Brink (from January 2014)  
Dr. G. Molleman (until September 2014)

### *Conducting organisations:*

Dr. E.J. de Boer  
Dr. M.C. Ocké  
Dr. C.T.M. van Rossum



## Appendix B Tables

### Table 5.1, Tables 5.1.a-5.1.h

Food consumption (food groups and food sub groups) of the Dutch population (DNFCS 2012-2014), total and stratified by age gender groups, weighted for socio-demographic characteristics, season and day of the week.

### Table 5.2, Tables 5.2.a-5.2.d

Average contribution of consumption moments to total food group consumption of the Dutch population (DNFCS 2012-2014) total and stratified by age groups, weighted for socio-demographic factors, season and day of the week.

### Table 5.3, Tables 5.3.a-5.3.d

Average contribution of places of consumption to total food group consumption of the Dutch population (DNFCS 2012-2014) total and stratified by age groups, weighted for socio-demographic factors, season and day of the week.

### Table 5.4

Mean consumption (main food groups) of the Dutch population in DNFCS 2007-2010 (column 2010) and DNFCS 2012-2014 (column 2014), weighted for socio-demographic factors, season and day of the week.

*Appendix B Table 5.1 Food consumption (food groups and food sub groups) of the Dutch population (DNFCS 2012-2014), weighted for socio-demographic characteristics, season and day of the week (n=2,237).*

Food groups based on GloboDiet classification					% Con- sumption days	On consumption days			
	mean g/day	P5 g/day	median g/day	P95 g/day		mean g/day	P5 g/day	median g/day	P95 g/day
<b>01. Potatoes and other tubers</b>	<b>73</b>	<b>0</b>	<b>61</b>	<b>210</b>	<b>49</b>	<b>148</b>	<b>40</b>	<b>140</b>	<b>308</b>
0100. Unclassified and other tubers	0	0	0	0	0	96	14	76	166
0101. Potatoes	73	0	61	210	49	148	40	140	308
<b>02. Vegetables</b>	<b>127</b>	<b>10</b>	<b>112</b>	<b>299</b>	<b>86</b>	<b>147</b>	<b>23</b>	<b>124</b>	<b>352</b>
0200. Unclassified, mixed salads/vegetables	9	0	0	61	12	79	13	58	200
0201. Leafy vegetables (except cabbages)	21	0	0	102	27	77	6	60	225
0202. Fruiting vegetables	46	0	26	154	50	90	6	68	253
0203. Root vegetables	12	0	0	81	19	59	4	28	200
0204. Cabbages	19	0	0	108	18	103	4	96	240
0205. Mushrooms	3	0	0	22	10	31	2	21	106
0206. Grain and pod vegetables	3	0	0	20	5	59	1	38	200
0207. Leek, onion, garlic	12	0	5	47	38	32	3	21	95
0208. Stalk vegetables, sprouts	2	0	0	6	7	34	1	7	176
<b>03. Legumes</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>37</b>	<b>4</b>	<b>103</b>	<b>18</b>	<b>96</b>	<b>225</b>
0301. Legumes	4	0	0	37	4	103	18	96	225
<b>04. Fruits, nuts and seeds, olives</b>	<b>122</b>	<b>0</b>	<b>87</b>	<b>352</b>	<b>66</b>	<b>184</b>	<b>18</b>	<b>151</b>	<b>448</b>
0400. Unclassified, mixed fruits, nuts and seeds	0	0	0	0	1	61	25	50	250
0401. Fruits, fruit compote	112	0	81	343	56	198	27	162	456
040101. Fruits	106	0	75	323	54	195	29	162	454
040102. Fruit compote	6	0	0	50	5	111	26	100	250
0402. Nuts and seeds (+ nut spread)	9	0	0	48	23	40	5	30	100
040201. Nuts, peanuts, seeds	5	0	0	34	12	41	3	30	100
040202. Peanut butter, nut/seeds spread	4	0	0	26	12	34	7	29	81
0403. Olives	1	0	0	0	2	22	1	16	60
<b>05. Dairy products and substitutes</b>	<b>355</b>	<b>33</b>	<b>316</b>	<b>818</b>	<b>94</b>	<b>378</b>	<b>36</b>	<b>329</b>	<b>887</b>
0500. Unclassified and mixed dairy products	3	0	0	0	2	169	50	148	353

Food groups based on GloboDiet classification	mean g/day	P5 g/day	median g/day	P95 g/day	% Con- sumption days	On consumption days			
						mean g/day	P5 g/day	median g/day	P95 g/day
0501. Milk, milk beverages and fermented milk beverages	208	0	149	618	60	345	49	282	811
050100. Unclassified or combined milk and milk beverages	3	0	0	0	1	266	67	258	515
050101. Non-fermented milk and milk beverages	154	0	84	542	48	317	26	266	786
050102. Fermented milk, milk beverages and yoghurt drinks	52	0	0	281	17	297	102	255	567
0502. Milk substitutes and milk substitute products	5	0	0	0	2	222	50	221	408
0503. Yoghurt	55	0	0	236	26	211	78	202	432
0504. Fromage blanc, petits suisses	9	0	0	77	6	165	27	150	500
0505. Cheeses (including spread cheeses)	33	0	25	95	66	50	11	37	124
0506. Cream desserts, puddings (milk based)	25	0	0	155	14	179	45	167	343
0507. Dairy and non- dairy creams, creamers	7	0	0	32	27	25	3	20	62
050700. Unclassified creams	4	0	0	26	19	24	3	18	60
050701. Dairy creams and creamers	2	0	0	14	9	22	3	20	50
050702. Non-dairy creams and creamers	0	0	0	0	1	39	10	40	104
0508. Ice cream and substitutes, sorbet and water ice	10	0	0	62	12	86	32	75	165
050800. Unclassified, combined ice creams/sorbets	0	0	0	0	1	67	40	56	150
050801. Ice cream (milk based)	8	0	0	50	9	89	32	75	150
050803. Sorbet/water ice	2	0	0	0	3	68	32	55	165
<b>06. Cereals and cereal products</b>	<b>192</b>	<b>60</b>	<b>178</b>	<b>369</b>	<b>98</b>	<b>196</b>	<b>50</b>	<b>175</b>	<b>415</b>
0601. Flour, starches, flakes, semolina used as flour	2	0	0	13	9	21	1	9	75
0602. Pasta, rice, other grain	46	0	12	178	33	136	18	118	320

Food groups based on GloboDiet classification						On consumption days			
	mean g/day	P5 g/day	median g/day	P95 g/day	% Con- sumption days	mean g/day	P5 g/day	median g/day	P95 g/day
0603. Bread, crisp bread, rusks	131	35	123	263	95	138	35	125	280
060301. Bread	126	30	118	259	92	137	40	123	280
060302. Crispbread, rusks	5	0	0	22	24	20	7	20	48
0604. Breakfast cereals	6	0	0	39	16	39	10	35	80
0605. Dough and pastry (plain puff, short-crust, pizza)	7	0	0	66	5	138	17	140	297
<b>07. Meat, meat products and substitutes</b>	<b>101</b>	<b>11</b>	<b>90</b>	<b>223</b>	<b>90</b>	<b>112</b>	<b>19</b>	<b>95</b>	<b>274</b>
0700. Unclassified and combined meat products	2	0	0	0	2	112	10	120	240
0701. Domestic mammals	18	0	0	86	22	84	12	70	188
070100. Unclassified, mixed and other mammals	4	0	0	29	6	56	14	49	128
070101. Beef	14	0	0	77	16	85	14	71	213
070102. Veal	0	0	0	0	0	87	11	75	172
070103. Pork	13	0	0	86	14	93	10	79	210
070104. Mutton/Lamb	1	0	0	0	1	80	33	70	178
070105. Horse	0	0	0	0	0	119	36	125	125
070107. Rabbit	0	0	0	0	0	90	21	109	109
0702. Poultry	17	0	0	85	20	82	18	69	200
070200. Unclassified and other poultry	0	0	0	0	0	188	21	77	344
070201. Chicken, hen	15	0	0	75	19	80	18	66	188
070202. Turkey, young turkey	0	0	0	0	0	102	27	109	277
070203. Duck	0	0	0	0	0	159	75	122	277
0703. Game	0	0	0	0	0	116	56	150	150
0704. Processed meat	48	0	38	134	68	70	10	48	189
070401. Hot processed meat	27	0	2	104	31	89	7	80	202
070402. Cold processed meat	21	0	15	63	55	37	10	30	93
0705. Offals	1	0	0	0	1	86	16	60	277
0706. Meat substitutes	2	0	0	0	2	80	10	78	210
070601. Hot meal substitutes	1	0	0	0	2	88	10	81	210
070602. Cold meal substitutes	0	0	0	0	0	28	10	19	61
<b>08. Fish, shellfish and amphibians</b>	<b>15</b>	<b>0</b>	<b>0</b>	<b>87</b>	<b>13</b>	<b>114</b>	<b>13</b>	<b>96</b>	<b>280</b>
0800. Unclassified and combined fish products	0	0	0	0	0	94	94	94	94



Food groups based on GloboDiet classification						On consumption days				
	mean g/day	P5 g/day	median g/day	P95 g/day	% Con- sumption days	mean g/day	P5 g/day	median g/day	P95 g/day	
0801. Fish	11	0	0	76	11	103	11	88	280	
0802. Crustaceans, molluscs	1	0	0	0	2	62	9	45	158	
0803. Fish products, fish in crumbs	3	0	0	0	2	133	14	109	350	
<b>09. Eggs and egg products</b>	<b>12</b>	<b>0</b>	<b>0</b>	<b>50</b>	<b>24</b>	<b>51</b>	<b>6</b>	<b>50</b>	<b>131</b>	
0901. Eggs	12	0	0	50	24	51	6	50	131	
<b>10. Fats and oils</b>	<b>22</b>	<b>3</b>	<b>19</b>	<b>53</b>	<b>94</b>	<b>24</b>	<b>3</b>	<b>20</b>	<b>58</b>	
1000. Unclassified and combined fat	2	0	0	9	18	9	1	6	27	
1001. Vegetable oils	3	0	1	13	35	9	1	6	27	
1002. Butter	2	0	0	12	13	14	1	10	37	
1003. Margarines and cooking fats	15	0	12	43	77	20	2	17	52	
1004. Other animal fats (including fish oils)	0	0	0	0	1	12	2	9	28	
<b>11. Sugar and confectionery</b>	<b>38</b>	<b>0</b>	<b>27</b>	<b>113</b>	<b>76</b>	<b>50</b>	<b>5</b>	<b>36</b>	<b>143</b>	
1100. Unclassified or combined confectionery	0	0	0	0	1	34	9	16	102	
1101. Sugar, honey, jam, syrup, sweet sauce	20	0	9	78	53	38	4	27	114	
110100. Unclassified and other sugar, honey, jam, syrup, sweet sauce	0	0	0	0	0	99	13	120	150	
110101. Sugar	5	0	0	28	27	18	2	11	57	
110102. Jam, jelly, marmelade	4	0	0	25	13	31	5	25	77	
110103. Honey	1	0	0	8	5	23	3	17	54	
110104. Other sweet spreads	3	0	0	21	8	34	7	31	88	
110105. Sweet sauce, sweet toppings for desserts	0	0	0	0	1	26	2	15	94	
110106. Syrups (incl. from can and for beverages)	7	0	0	47	16	46	8	31	146	
1102. Chocolate, candy bars, paste, confetti/flakes	11	0	3	47	38	30	5	22	80	
110200. Unclassified and other chocolate confectionary (incl. sauce)	3	0	0	15	18	16	3	10	43	
110201. Chocolate tablet	3	0	0	20	10	29	7	21	90	
110202. Chocolate candybars	2	0	0	11	4	37	16	34	66	

Food groups based on GloboDiet classification	mean g/day	P5 g/day	median g/day	P95 g/day	% Con- sumption days	On consumption days			
						mean g/day	P5 g/day	median g/day	P95 g/day
110203. Chocolate spread and chocolate powder	3	0	0	23	9	33	6	27	72
110204. Chocolate confectionary	1	0	0	7	3	31	7	20	100
1103. Confectionary non-chocolate	6	0	0	27	29	21	1	10	60
<b>12. Cakes and sweet biscuits</b>	<b>39</b>	<b>0</b>	<b>30</b>	<b>122</b>	<b>63</b>	<b>63</b>	<b>10</b>	<b>47</b>	<b>176</b>
1201. Cakes, pies, pastries, puddings (non-milk based)	22	0	0	88	31	73	20	56	192
1202. Dry cakes, sweet biscuits	17	0	10	62	45	38	7	30	100
<b>13. Non-alcoholic beverages</b>	<b>1,725</b>	<b>603</b>	<b>1,626</b>	<b>3,148</b>	<b>100</b>	<b>1,729</b>	<b>542</b>	<b>1,580</b>	<b>3,370</b>
1300. Unclassified and combined non-alcoholic drinks	4	0	0	0	1	399	6	300	1,200
1301. Fruit and vegetable juices	63	0	0	285	24	267	18	215	680
1302. Carbonated/soft/isotonic drinks, diluted syrups	295	0	163	1,058	52	568	160	450	1,425
1303. Coffee, tea and herbal teas	724	0	679	1,754	78	925	186	818	2,000
130301. Coffee	406	0	296	1,217	61	666	155	630	1,387
130302. Tea	230	0	0	1,025	39	582	150	417	1,550
130303. Herbal tea	88	0	0	536	15	562	150	360	1,654
130304. Chicory, substitutes	0	0	0	0	0	215	213	213	217
1304. Waters	639	0	490	1,811	84	764	55	579	2,075
<b>14. Alcoholic beverages</b>	<b>152</b>	<b>0</b>	<b>0</b>	<b>750</b>	<b>30</b>	<b>513</b>	<b>45</b>	<b>330</b>	<b>1,830</b>
1400. Unclassified, cocktails, punches	1	0	0	0	1	135	2	40	458
1401. Wine, cider, fruit wines	38	0	0	250	15	252	67	208	500
1402. Fortified wines (sherry, porto, vermouth)	2	0	0	0	1	105	0	86	215
1403. Beer	108	0	0	683	13	814	300	600	2,310
1404. Spirits, brandy	3	0	0	15	4	76	14	57	228
1405. Aniseed drinks	0	0	0	0	0	63	60	60	66
1406. Liqueurs	1	0	0	0	1	68	13	55	183
<b>15. Condiments, spices, sauces and yeast</b>	<b>37</b>	<b>0</b>	<b>27</b>	<b>109</b>	<b>74</b>	<b>50</b>	<b>4</b>	<b>35</b>	<b>150</b>

Food groups based on GloboDiet classification	mean g/day	P5 g/day	median g/day	P95 g/day	% Con- sumption days	On consumption days			
						mean g/day	P5 g/day	median g/day	P95 g/day
1500. Unclassified or combined condiments and sauces	1	0	0	0	1	51	9	35	164
1501. Savory sauces	33	0	23	106	61	55	7	39	160
150100. Other and mixed sauces	14	0	0	60	29	48	6	35	132
150101. Tomato sauces	6	0	0	37	16	41	6	28	116
150102. Dressings, mayonnaises and similar	8	0	0	38	28	30	4	23	81
150103. Mayonnaise based spreads	5	0	0	30	9	53	10	40	152
1503. Spices, herbs and flavourings	0	0	0	0	0	6	1	8	12
1504. Condiments	3	0	0	17	28	12	1	8	35
<b>16. Soups and stocks</b>	<b>24</b>	<b>0</b>	<b>0</b>	<b>141</b>	<b>13</b>	<b>192</b>	<b>34</b>	<b>180</b>	<b>433</b>
1602. Stocks	24	0	0	141	13	192	34	180	433
<b>17. Miscellaneous</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>258</b>	<b>19</b>	<b>258</b>	<b>515</b>
1701. Vegetarian products/dishes	0	0	0	0	0	125	125	125	125
1702. Dietetic products	4	0	0	0	2	263	19	258	515
170201. Artificial sweeteners	0	0	0	0	0	6	4	7	9
170202. Meal substitutes	4	0	0	0	1	272	28	258	515
<b>18. Savoury snacks</b>	<b>20</b>	<b>0</b>	<b>0</b>	<b>88</b>	<b>30</b>	<b>67</b>	<b>10</b>	<b>51</b>	<b>175</b>
1800. Unclassified or combined snacks	0	0	0	0	0	32	11	20	79
1801. Savoury snacks, biscuits and crisps	10	0	0	50	22	45	6	40	119
1802. Savoury filled buns, croissants	10	0	0	63	11	97	32	72	225
<b>19. Ready meals</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>234</b>	<b>190</b>	<b>250</b>	<b>250</b>
1901. Jarred meals for children	0	0	0	0	0	234	190	250	250

Appendix B Table 5.1.a Food consumption (food groups and food subgroups) of Dutch children aged 1-3 years (DNFCS 2012-2014), weighted for socio-demographic characteristics, season and day of the week (n=362).

Food groups based on GloboDiet classification	mean g/day	P5 g/day	median g/day	P95 g/day	% Con- sumption days	On consumption days			
						mean g/day	P5 g/day	median g/day	P95 g/day
<b>01. Potatoes and other tubers</b>	<b>36</b>	<b>0</b>	<b>31</b>	<b>97</b>	<b>52</b>	<b>69</b>	<b>16</b>	<b>62</b>	<b>140</b>
0100. Unclassified and other tubers	0	0	0	0	1	49	9	51	83
0101. Potatoes	36	0	31	97	51	70	16	62	140
<b>02. Vegetables</b>	<b>48</b>	<b>0</b>	<b>39</b>	<b>125</b>	<b>73</b>	<b>65</b>	<b>9</b>	<b>51</b>	<b>163</b>
0200. Unclassified, mixed salads/vegetables	3	0	0	25	11	29	3	21	68
0201. Leafy vegetables (except cabbages)	5	0	0	39	11	44	2	30	102
0202. Fruiting vegetables	21	0	6	92	40	54	5	41	156
0203. Root vegetables	7	0	0	50	13	49	2	31	145
0204. Cabbages	8	0	0	50	14	54	2	45	136
0205. Mushrooms	1	0	0	3	6	10	2	6	27
0206. Grain and pod vegetables	1	0	0	3	4	17	1	15	50
0207. Leek, onion, garlic	2	0	0	11	20	10	1	6	31
0208. Stalk vegetables, sprouts	0	0	0	0	3	15	0	2	85
<b>03. Legumes</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>53</b>	<b>6</b>	<b>42</b>	<b>125</b>
0301. Legumes	1	0	0	0	2	53	6	42	125
<b>04. Fruits, nuts and seeds, olives</b>	<b>145</b>	<b>20</b>	<b>135</b>	<b>295</b>	<b>89</b>	<b>163</b>	<b>30</b>	<b>144</b>	<b>345</b>
0400. Unclassified, mixed fruits, nuts and seeds	0	0	0	0	0	0	0	0	0
0401. Fruits, fruit compote	141	17	130	289	87	163	38	144	335
040101. Fruits	125	0	120	274	81	156	34	137	311
040102. Fruit compote	16	0	0	100	17	94	26	100	200
0402. Nuts and seeds (+ nut spread)	4	0	0	20	22	17	4	15	39
040201. Nuts, peanuts, seeds	0	0	0	0	2	13	1	10	25
040202. Peanut butter, nut/seeds spread	3	0	0	20	20	17	5	15	39
0403. Olives	0	0	0	0	1	13	2	8	32
<b>05. Dairy products and substitutes</b>	<b>406</b>	<b>125</b>	<b>402</b>	<b>745</b>	<b>99</b>	<b>413</b>	<b>84</b>	<b>397</b>	<b>777</b>
0500. Unclassified and mixed dairy products	6	0	0	50	7	87	25	75	206
0501. Milk, milk beverages and fermented milk beverages	299	0	301	639	88	342	103	314	669
050100. Unclassified or combined milk and milk beverages	12	0	0	103	5	234	52	206	472

Food groups based on GloboDiet classification	mean g/day	P5 g/day	median g/day	P95 g/day	% Con- sumption days	On consumption days			
						mean g/day	P5 g/day	median g/day	P95 g/day
050101. Non-fermented milk and milk beverages	223	0	206	536	77	292	56	258	602
050102. Fermented milk, milk beverages and yoghurt drinks	64	0	0	306	27	235	77	206	525
0502. Milk substitutes and milk substitute products	9	0	0	7	4	231	62	196	515
0503. Yoghurt	33	0	0	135	26	127	39	108	222
0504. Fromage blanc, petits suisses	5	0	0	45	7	74	25	62	150
0505. Cheeses (including spread cheeses)	13	0	10	40	52	25	5	20	60
0506. Cream desserts, puddings (milk based)	34	0	0	149	23	149	16	125	412
0507. Dairy and non-dairy creams, creamers	0	0	0	4	5	9	1	8	25
050700. Unclassified creams	0	0	0	0	0	8	6	8	9
050701. Dairy creams and creamers	0	0	0	4	5	9	1	8	25
050702. Non-dairy creams and creamers	0	0	0	0	0	20	20	20	20
0508. Ice cream and substitutes, sorbet and water ice	6	0	0	30	12	53	12	50	114
050800. Unclassified, combined ice creams/sorbets	0	0	0	0	0	50	42	42	65
050801. Ice cream (milk based)	3	0	0	25	5	52	6	50	75
050803. Sorbet/water ice	4	0	0	28	7	50	16	50	110
<b>06. Cereals and cereal products</b>	<b>109</b>	<b>47</b>	<b>103</b>	<b>197</b>	<b>99</b>	<b>110</b>	<b>35</b>	<b>103</b>	<b>215</b>
0601. Flour, starches, flakes, semolina used as flour	2	0	0	16	9	22	1	19	61
0602. Pasta, rice, other grain	16	0	0	65	29	56	7	48	150
0603. Bread, crisp bread, rusks	82	27	79	148	97	85	26	77	155
060301. Bread	80	24	76	145	96	83	30	70	155
060302. Crispbread, rusks	3	0	0	14	24	11	3	10	27
0604. Breakfast cereals	6	0	0	36	25	26	5	20	60
0605. Dough and pastry (plain puff, short-crust, pizza)	2	0	0	9	3	61	8	44	241
<b>07. Meat, meat products and substitutes</b>	<b>40</b>	<b>0</b>	<b>37</b>	<b>87</b>	<b>85</b>	<b>47</b>	<b>7</b>	<b>40</b>	<b>104</b>
0700. Unclassified and combined meat meat products	0	0	0	0	1	25	7	21	54
0701. Domestic mammals	5	0	0	38	15	36	3	30	79

Food groups based on GloboDiet classification	mean g/day	P5 g/day	median g/day	P95 g/day	% Con- sumption days	On consumption days			
						mean g/day	P5 g/day	median g/day	P95 g/day
070100. Unclassified, mixed and other mammals	1	0	0	9	5	26	3	18	77
070101. Beef	3	0	0	20	12	27	6	20	75
070102. Veal	0	0	0	0	0	74	74	74	74
070103. Pork	4	0	0	38	10	41	3	36	79
070104. Mutton/Lamb	0	0	0	0	0	25	18	26	32
070105. Horse	0	0	0	0	0	36	36	36	36
070107. Rabbit	0	0	0	0	0	0	0	0	0
0702. Poultry	5	0	0	27	15	31	7	24	80
070200. Unclassified and other poultry	0	0	0	0	0	0	0	0	0
070201. Chicken, hen	5	0	0	27	15	31	7	24	80
070202. Turkey, young turkey	0	0	0	0	0	20	13	13	27
070203. Duck	0	0	0	0	0	4	4	4	4
0703. Game	0	0	0	0	0	0	0	0	0
0704. Processed meat	26	0	18	75	65	40	6	27	102
070401. Hot processed meat	15	0	0	59	29	52	4	50	105
070402. Cold processed meat	11	0	8	34	50	21	6	18	49
0705. Offals	0	0	0	0	0	0	0	0	0
0706. Meat substitutes	0	0	0	0	1	18	6	19	31
070601. Hot meal substitutes	0	0	0	0	0	20	19	20	20
070602. Cold meal substitutes	0	0	0	0	0	18	6	19	31
<b>08. Fish, shellfish and amphibians</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>33</b>	<b>8</b>	<b>54</b>	<b>8</b>	<b>50</b>	<b>126</b>
0800. Unclassified and combined fish products	0	0	0	0	0	0	0	0	0
0801. Fish	1	0	0	8	3	39	8	30	79
0802. Crustaceans, molluscs	0	0	0	0	0	28	9	36	36
0803. Fish products, fish in crumbs	3	0	0	27	4	67	14	54	130
<b>09. Eggs and egg products</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>31</b>	<b>21</b>	<b>31</b>	<b>2</b>	<b>25</b>	<b>90</b>
0901. Eggs	6	0	0	31	21	31	2	25	90
<b>10. Fats and oils</b>	<b>13</b>	<b>2</b>	<b>12</b>	<b>28</b>	<b>94</b>	<b>14</b>	<b>2</b>	<b>12</b>	<b>30</b>
1000. Unclassified and combined fat	0	0	0	3	9	5	0	3	14
1001. Vegetable oils	1	0	0	6	31	4	0	2	14
1002. Butter	1	0	0	5	9	8	1	6	27
1003. Margarines and cooking fats	11	0	9	25	83	13	3	12	28
1004. Other animal fats (including fish oils)	0	0	0	0	1	4	0	2	12
<b>11. Sugar and confectionery</b>	<b>48</b>	<b>3</b>	<b>39</b>	<b>122</b>	<b>91</b>	<b>52</b>	<b>6</b>	<b>40</b>	<b>126</b>
1100. Unclassified or combined confectionery	0	0	0	0	1	16	7	14	30

Food groups based on GloboDiet classification	mean g/day	P5 g/day	median g/day	P95 g/day	% Con- sumption days	On consumption days			
						mean g/day	P5 g/day	median g/day	P95 g/day
1101. Sugar, honey, jam, syrup, sweet sauce	33	0	25	101	74	44	5	33	124
110100. Unclassified and other sugar, honey, jam, syrup, sweet sauce	0	0	0	0	0	0	0	0	0
110101. Sugar	1	0	0	5	15	6	0	4	16
110102. Jam, jelly, marmelade	2	0	0	17	13	19	5	19	39
110103. Honey	1	0	0	5	5	15	1	11	34
110104. Other sweet spreads	3	0	0	20	16	19	5	15	46
110105. Sweet sauce, sweet toppings for desserts	0	0	0	0	1	9	1	6	15
110106. Syrups (incl. from can and for beverages)	26	0	15	87	59	44	6	31	120
1102. Chocolate, candy bars, paste, confetti/flakes	9	0	5	35	48	19	3	13	51
110200. Unclassified and other chocolate confectionary (incl. sauce)	2	0	0	11	26	9	2	7	20
110201. Chocolate tablet	1	0	0	6	7	14	3	10	30
110202. Chocolate candybars	0	0	0	0	1	23	5	18	58
110203. Chocolate spread and chocolate powder	5	0	0	29	20	24	2	23	54
110204. Chocolate confectionary	1	0	0	7	4	14	7	14	20
1103. Confectionary non- chocolate	6	0	1	26	37	15	2	11	40
<b>12. Cakes and sweet biscuits</b>	<b>21</b>	<b>0</b>	<b>15</b>	<b>60</b>	<b>68</b>	<b>32</b>	<b>6</b>	<b>23</b>	<b>90</b>
1201. Cakes, pies, pastries, puddings (non-milk based)	9	0	0	44	23	41	15	29	96
1202. Dry cakes, sweet biscuits	12	0	8	38	57	21	5	15	60
<b>13. Non-alcoholic beverages</b>	<b>572</b>	<b>197</b>	<b>542</b>	<b>1,127</b>	<b>100</b>	<b>570</b>	<b>170</b>	<b>527</b>	<b>1,187</b>
1300. Unclassified and combined non-alcoholic drinks	0	0	0	0	0	7	2	2	12
1301. Fruit and vegetable juices	41	0	0	193	20	199	52	172	515
1302. Carbonated/soft/isotonic drinks, diluted syrups	164	0	100	526	48	344	75	270	804
1303. Coffee, tea and herbal teas	36	0	0	200	17	205	38	165	650
130301. Coffee	0	0	0	0	0	25	25	25	25
130302. Tea	21	0	0	150	12	186	38	155	400
130303. Herbal tea	15	0	0	90	6	236	36	170	750

Food groups based on GloboDiet classification	mean g/day	P5 g/day	median g/day	P95 g/day	% Con- sumption days	On consumption days			
						mean g/day	P5 g/day	median g/day	P95 g/day
130304. Chicory, substitutes	0	0	0	0	0	0	0	0	0
1304. Waters	330	0	286	810	87	378	45	322	881
<b>14. Alcoholic beverages</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>12</b>	<b>1</b>	<b>6</b>	<b>29</b>
1400. Unclassified, cocktails, punches	0	0	0	0	0	0	0	0	0
1401. Wine, cider, fruit wines	0	0	0	0	0	12	1	6	29
1402. Fortified wines (sherry, porto, vermouth)	0	0	0	0	0	0	0	0	0
1403. Beer	0	0	0	0	0	0	0	0	0
1404. Spirits, brandy	0	0	0	0	0	0	0	0	0
1405. Aniseed drinks	0	0	0	0	0	0	0	0	0
1406. Liqueurs	0	0	0	0	0	0	0	0	0
<b>15. Condiments, spices, sauces and yeast</b>	<b>8</b>	<b>0</b>	<b>5</b>	<b>32</b>	<b>50</b>	<b>17</b>	<b>1</b>	<b>12</b>	<b>55</b>
1500. Unclassified or combined condiments and sauces	0	0	0	0	1	23	9	29	40
1501. Savory sauces	8	0	4	28	38	20	2	15	59
150100. Other and mixed sauces	3	0	0	18	17	20	4	16	59
150101. Tomato sauces	2	0	0	14	10	20	2	14	57
150102. Dressings, mayonnaises and similar	2	0	0	13	14	15	2	12	34
150103. Mayonnaise based spreads	0	0	0	0	2	19	5	15	45
1503. Spices, herbs and flavourings	0	0	0	0	0	0	0	0	0
1504. Condiments	1	0	0	3	15	4	0	2	13
<b>16. Soups and stocks</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>38</b>	<b>4</b>	<b>88</b>	<b>14</b>	<b>86</b>	<b>156</b>
1602. Stocks	4	0	0	38	4	88	14	86	156
<b>17. Miscellaneous</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>43</b>	<b>43</b>	<b>43</b>	<b>43</b>
1701. Vegetarian products/dishes	0	0	0	0	0	0	0	0	0
1702. Dietetic products	0	0	0	0	0	43	43	43	43
170201. Artificial sweeteners	0	0	0	0	0	0	0	0	0
170202. Meal substitutes	0	0	0	0	0	43	43	43	43
<b>18. Savoury snacks</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>36</b>	<b>29</b>	<b>24</b>	<b>3</b>	<b>19</b>	<b>75</b>
1800. Unclassified or combined snacks	0	0	0	0	0	11	10	11	11
1801. Savoury snacks, biscuits and crisps	5	0	0	20	26	18	3	15	43
1802. Savoury filled buns, croissants	2	0	0	25	4	54	13	60	120
<b>19. Ready meals</b>	<b>10</b>	<b>0</b>	<b>0</b>	<b>115</b>	<b>4</b>	<b>234</b>	<b>190</b>	<b>250</b>	<b>250</b>
1901. Jarred meals for children	10	0	0	115	4	234	190	250	250



Appendix B Table 5.1.b Food consumption (food groups and food subgroups) of Dutch children aged 4-8 years (DNFCS 2012-2014), weighted for socio-demographic characteristics, season and day of the week (n=296).

Food groups based on GloboDiet classification	mean g/day	P5 g/day	median g/day	P95 g/day	% Con- sumption days	On consumption days			
						mean g/day	P5 g/day	median g/day	P95 g/day
<b>01. Potatoes and other tubers</b>	<b>50</b>	<b>0</b>	<b>40</b>	<b>131</b>	<b>53</b>	<b>96</b>	<b>29</b>	<b>73</b>	<b>226</b>
0100. Unclassified and other tubers	0	0	0	0	0	14	14	14	14
0101. Potatoes	50	0	40	131	53	96	30	73	226
<b>02. Vegetables</b>	<b>73</b>	<b>0</b>	<b>60</b>	<b>181</b>	<b>79</b>	<b>93</b>	<b>13</b>	<b>77</b>	<b>240</b>
0200. Unclassified, mixed salads/vegetables	3	0	0	24	10	34	5	27	93
0201. Leafy vegetables (except cabbages)	10	0	0	64	16	61	4	46	174
0202. Fruiting vegetables	33	0	15	129	41	80	8	60	216
0203. Root vegetables	6	0	0	44	12	50	2	31	145
0204. Cabbages	14	0	0	72	19	76	8	74	180
0205. Mushrooms	1	0	0	8	7	14	2	8	50
0206. Grain and pod vegetables	1	0	0	10	4	42	2	28	120
0207. Leek, onion, garlic	4	0	0	19	24	17	1	12	45
0208. Stalk vegetables, sprouts	1	0	0	0	3	23	1	18	88
<b>03. Legumes</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>51</b>	<b>16</b>	<b>50</b>	<b>120</b>
0301. Legumes	1	0	0	0	2	51	16	50	120
<b>04. Fruits, nuts and seeds, olives</b>	<b>135</b>	<b>0</b>	<b>124</b>	<b>307</b>	<b>78</b>	<b>174</b>	<b>26</b>	<b>148</b>	<b>393</b>
0400. Unclassified, mixed fruits, nuts and seeds	0	0	0	0	0	17	3	25	25
0401. Fruits, fruit compote	130	0	117	307	73	178	54	144	393
040101. Fruits	118	0	102	283	70	169	48	136	390
040102. Fruit compote	12	0	0	71	12	99	26	100	200
0402. Nuts and seeds (+ nut spread)	5	0	0	25	22	22	5	20	48
040201. Nuts, peanuts, seeds	1	0	0	7	4	20	3	16	80
040202. Peanut butter, nut/seeds spread	4	0	0	24	18	22	6	20	48
0403. Olives	0	0	0	0	0	13	5	16	20
<b>05. Dairy products and substitutes</b>	<b>386</b>	<b>92</b>	<b>362</b>	<b>770</b>	<b>97</b>	<b>399</b>	<b>51</b>	<b>370</b>	<b>816</b>
0500. Unclassified and mixed dairy products	5	0	0	50	4	111	35	100	206
0501. Milk, milk beverages and fermented milk beverages	279	0	258	626	80	347	109	309	761
050100. Unclassified or combined milk and milk beverages	4	0	0	0	2	207	144	206	457

Food groups based on GloboDiet classification	mean g/day	P5 g/day	median g/day	P95 g/day	% Con- sumption days	On consumption days			
						mean g/day	P5 g/day	median g/day	P95 g/day
050101. Non-fermented milk and milk beverages	188	0	155	555	64	294	40	220	670
050102. Fermented milk, milk beverages and yoghurt drinks	87	0	0	375	31	274	129	214	567
0502. Milk substitutes and milk substitute products	9	0	0	0	3	269	99	176	533
0503. Yoghurt	25	0	0	144	16	153	50	150	288
0504. Fromage blanc, petits suisses	6	0	0	49	6	85	40	80	150
0505. Cheeses (including spread cheeses)	17	0	14	53	54	31	7	24	76
0506. Cream desserts, puddings (milk based)	27	0	0	120	22	132	41	126	237
0507. Dairy and non-dairy creams, creamers	2	0	0	10	8	18	3	13	64
050700. Unclassified creams	0	0	0	0	0	24	14	25	38
050701. Dairy creams and creamers	1	0	0	10	7	18	3	12	64
050702. Non-dairy creams and creamers	0	0	0	0	0	8	8	8	8
0508. Ice cream and substitutes, sorbet and water ice	17	0	0	71	23	72	32	55	164
050800. Unclassified, combined ice creams/sorbets	1	0	0	0	2	49	16	48	98
050801. Ice cream (milk based)	8	0	0	48	12	72	28	70	150
050803. Sorbet/water ice	8	0	0	51	12	64	35	55	110
<b>06. Cereals and cereal products</b>	<b>147</b>	<b>67</b>	<b>141</b>	<b>246</b>	<b>99</b>	<b>147</b>	<b>48</b>	<b>135</b>	<b>289</b>
0601. Flour, starches, flakes, semolina used as flour	3	0	0	21	9	29	2	23	70
0602. Pasta, rice, other grain	25	0	0	87	29	88	11	69	220
0603. Bread, crisp bread, rusks	109	41	104	189	98	111	35	105	220
060301. Bread	106	35	100	185	96	109	35	105	218
060302. Crispbread, rusks	4	0	0	15	24	16	7	12	37
0604. Breakfast cereals	5	0	0	30	14	37	5	30	80
0605. Dough and pastry (plain puff, short-crust, pizza)	4	0	0	25	4	98	13	59	306
<b>07. Meat, meat products and substitutes</b>	<b>61</b>	<b>5</b>	<b>55</b>	<b>140</b>	<b>88</b>	<b>70</b>	<b>11</b>	<b>60</b>	<b>163</b>
0700. Unclassified and combined meat meat products	1	0	0	0	2	70	14	57	125
0701. Domestic mammals	8	0	0	39	16	51	8	39	113

Food groups based on GloboDiet classification	mean g/day	P5 g/day	median g/day	P95 g/day	% Con- sumption days	On consumption days				
						mean g/day	P5 g/day	median g/day	P95 g/day	
070100. Unclassified, mixed and other mammals	2	0	0	18	6	36	11	32	77	
070101. Beef	5	0	0	36	12	41	5	32	112	
070102. Veal	0	0	0	0	0	0	0	0	0	
070103. Pork	6	0	0	39	10	61	8	57	125	
070104. Mutton/Lamb	0	0	0	0	0	31	21	21	42	
070105. Horse	0	0	0	0	0	0	0	0	0	
070107. Rabbit	0	0	0	0	0	0	0	0	0	
0702. Poultry	7	0	0	43	13	52	9	38	144	
070200. Unclassified and other poultry	0	0	0	0	0	0	0	0	0	
070201. Chicken, hen	7	0	0	42	13	51	9	38	144	
070202. Turkey, young turkey	0	0	0	0	1	74	17	75	125	
070203. Duck	0	0	0	0	0	0	0	0	0	
0703. Game	0	0	0	0	0	0	0	0	0	
0704. Processed meat	39	0	33	102	71	56	8	48	142	
070401. Hot processed meat	24	0	12	80	37	67	6	68	150	
070402. Cold processed meat	15	0	11	51	50	30	8	22	71	
0705. Offals	0	0	0	0	0	0	0	0	0	
0706. Meat substitutes	1	0	0	0	1	41	6	44	86	
070601. Hot meal substitutes	0	0	0	0	1	46	6	50	86	
070602. Cold meal substitutes	0	0	0	0	0	11	11	11	11	
<b>08. Fish, shellfish and amphibians</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>56</b>	<b>8</b>	<b>87</b>	<b>13</b>	<b>71</b>	<b>201</b>	
0800. Unclassified and combined fish products	0	0	0	0	0	0	0	0	0	
0801. Fish	3	0	0	27	4	76	11	71	201	
0802. Crustaceans, molluscs	0	0	0	0	1	35	1	23	100	
0803. Fish products, fish in crumbs	4	0	0	33	4	99	13	68	300	
<b>09. Eggs and egg products</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>45</b>	<b>20</b>	<b>38</b>	<b>4</b>	<b>45</b>	<b>90</b>	
0901. Eggs	8	0	0	45	20	38	4	45	90	
<b>10. Fats and oils</b>	<b>16</b>	<b>2</b>	<b>16</b>	<b>33</b>	<b>95</b>	<b>17</b>	<b>2</b>	<b>15</b>	<b>37</b>	
1000. Unclassified and combined fat	1	0	0	5	11	6	1	5	15	
1001. Vegetable oils	1	0	0	8	27	5	1	4	17	
1002. Butter	1	0	0	7	8	9	1	7	24	
1003. Margarines and cooking fats	13	0	12	28	84	15	2	13	35	
1004. Other animal fats (including fish oils)	0	0	0	0	2	14	4	15	24	
<b>11. Sugar and confectionery</b>	<b>60</b>	<b>12</b>	<b>53</b>	<b>135</b>	<b>96</b>	<b>62</b>	<b>10</b>	<b>53</b>	<b>148</b>	
1100. Unclassified or combined confectionery	0	0	0	0	2	16	6	17	31	

Food groups based on GloboDiet classification	mean g/day	P5 g/day	median g/day	P95 g/day	% Con- sumption days	On consumption days			
						mean g/day	P5 g/day	median g/day	P95 g/day
1101. Sugar, honey, jam, syrup, sweet sauce	33	0	25	94	71	46	6	38	118
110100. Unclassified and other sugar, honey, jam, syrup, sweet sauce	0	0	0	0	0	13	13	13	13
110101. Sugar	2	0	0	11	17	10	1	7	28
110102. Jam, jelly, marmelade	2	0	0	10	7	24	5	17	50
110103. Honey	1	0	0	3	4	11	1	7	27
110104. Other sweet spreads	3	0	0	21	12	27	7	21	74
110105. Sweet sauce, sweet toppings for desserts	0	0	0	0	0	16	3	15	30
110106. Syrups (incl. from can and for beverages)	26	0	16	78	54	47	10	38	121
1102. Chocolate, candy bars, paste, confetti/flakes	17	0	12	45	63	26	5	20	64
110200. Unclassified and other chocolate confectionary (incl. sauce)	4	0	0	16	32	12	3	10	29
110201. Chocolate tablet	3	0	0	19	13	21	6	18	50
110202. Chocolate candybars	1	0	0	9	4	25	16	20	51
110203. Chocolate spread and chocolate powder	8	0	0	32	27	30	6	23	72
110204. Chocolate confectionary	1	0	0	7	5	17	2	14	38
1103. Confectionary non- chocolate	10	0	8	33	56	18	4	15	49
<b>12. Cakes and sweet biscuits</b>	<b>35</b>	<b>0</b>	<b>32</b>	<b>88</b>	<b>74</b>	<b>49</b>	<b>10</b>	<b>38</b>	<b>124</b>
1201. Cakes, pies, pastries, puddings (non-milk based)	18	0	14	63	34	53	19	40	115
1202. Dry cakes, sweet biscuits	17	0	15	50	53	33	7	30	78
<b>13. Non-alcoholic beverages</b>	<b>796</b>	<b>399</b>	<b>788</b>	<b>1,364</b>	<b>99</b>	<b>804</b>	<b>333</b>	<b>761</b>	<b>1,429</b>
1300. Unclassified and combined non-alcoholic drinks	0	0	0	0	0	103	18	18	206
1301. Fruit and vegetable juices	64	0	0	283	25	255	77	206	567
1302. Carbonated/soft/isotonic drinks, diluted syrups	294	0	238	729	69	425	125	367	950
1303. Coffee, tea and herbal teas	42	0	0	260	18	231	60	191	579
130301. Coffee	0	0	0	0	0	100	36	157	157
130302. Tea	33	0	0	212	15	227	69	200	508
130303. Herbal tea	9	0	0	64	5	197	70	167	554

Food groups based on GloboDiet classification	mean g/day	P5 g/day	median g/day	P95 g/day	% Con- sumption days	On consumption days			
						mean g/day	P5 g/day	median g/day	P95 g/day
130304. Chicory, substitutes	0	0	0	0	0	0	0	0	0
1304. Waters	395	3	350	902	88	450	69	416	978
<b>14. Alcoholic beverages</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>4</b>
1400. Unclassified, cocktails, punches	0	0	0	0	0	0	0	0	0
1401. Wine, cider, fruit wines	0	0	0	0	0	4	4	4	4
1402. Fortified wines (sherry, porto, vermouth)	0	0	0	0	0	0	0	0	0
1403. Beer	0	0	0	0	0	0	0	0	0
1404. Spirits, brandy	0	0	0	0	0	1	1	1	1
1405. Aniseed drinks	0	0	0	0	0	0	0	0	0
1406. Liqueurs	0	0	0	0	0	0	0	0	0
<b>15. Condiments, spices, sauces and yeast</b>	<b>17</b>	<b>0</b>	<b>11</b>	<b>58</b>	<b>60</b>	<b>29</b>	<b>3</b>	<b>22</b>	<b>81</b>
1500. Unclassified or combined condiments and sauces	0	0	0	0	0	0	0	0	0
1501. Savory sauces	16	0	10	58	51	32	4	24	84
150100. Other and mixed sauces	6	0	0	27	23	27	4	23	78
150101. Tomato sauces	5	0	0	26	17	30	5	22	86
150102. Dressings, mayonnaises and similar	4	0	0	20	23	20	3	17	50
150103. Mayonnaise based spreads	1	0	0	0	2	34	4	30	150
1503. Spices, herbs and flavourings	0	0	0	0	0	0	0	0	0
1504. Condiments	1	0	0	5	17	6	1	4	17
<b>16. Soups and stocks</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>51</b>	<b>5</b>	<b>129</b>	<b>19</b>	<b>101</b>	<b>380</b>
1602. Stocks	6	0	0	51	5	129	19	101	380
<b>17. Miscellaneous</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>9</b>	<b>9</b>	<b>9</b>	<b>9</b>
1701. Vegetarian products/dishes	0	0	0	0	0	0	0	0	0
1702. Dietetic products	0	0	0	0	0	9	9	9	9
170201. Artificial sweeteners	0	0	0	0	0	9	9	9	9
170202. Meal substitutes	0	0	0	0	0	0	0	0	0
<b>18. Savoury snacks</b>	<b>13</b>	<b>0</b>	<b>5</b>	<b>58</b>	<b>33</b>	<b>39</b>	<b>6</b>	<b>25</b>	<b>110</b>
1800. Unclassified or combined snacks	0	0	0	0	0	0	0	0	0
1801. Savoury snacks, biscuits and crisps	8	0	0	31	30	27	5	25	60
1802. Savoury filled buns, croissants	5	0	0	35	6	78	32	68	165
<b>19. Ready meals</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
1901. Jarred meals for children	0	0	0	0	0	0	0	0	0

Appendix B Table 5.1.c Food consumption (food groups and food subgroups) of Dutch boys aged 9-18 years (DNFCS 2012-2014), weighted for socio-demographic characteristics, season and day of the week (n=259).

Food groups based on GloboDiet classification	mean g/day	P5 g/day	median g/day	P95 g/day	% Con- sumption days	On consumption days			
						mean g/day	P5 g/day	median g/day	P95 g/day
<b>01. Potatoes and other tubers</b>	<b>79</b>	<b>0</b>	<b>72</b>	<b>206</b>	<b>49</b>	<b>162</b>	<b>62</b>	<b>143</b>	<b>308</b>
0100. Unclassified and other tubers	0	0	0	0	0	14	14	14	14
0101. Potatoes	79	0	72	206	49	163	62	143	308
<b>02. Vegetables</b>	<b>90</b>	<b>0</b>	<b>71</b>	<b>259</b>	<b>78</b>	<b>117</b>	<b>12</b>	<b>98</b>	<b>300</b>
0200. Unclassified, mixed salads/vegetables	7	0	0	38	11	73	15	44	228
0201. Leafy vegetables (except cabbages)	14	0	0	87	21	69	7	40	196
0202. Fruiting vegetables	35	0	17	142	46	77	4	55	217
0203. Root vegetables	7	0	0	66	13	54	3	25	200
0204. Cabbages	14	0	0	90	15	102	3	100	243
0205. Mushrooms	1	0	0	8	7	22	1	12	73
0206. Grain and pod vegetables	2	0	0	21	5	33	2	20	100
0207. Leek, onion, garlic	8	0	2	34	34	23	1	16	70
0208. Stalk vegetables, sprouts	1	0	0	1	5	14	1	5	57
<b>03. Legumes</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>25</b>	<b>4</b>	<b>95</b>	<b>20</b>	<b>71</b>	<b>240</b>
0301. Legumes	3	0	0	25	4	95	20	71	240
<b>04. Fruits, nuts and seeds, olives</b>	<b>94</b>	<b>0</b>	<b>70</b>	<b>278</b>	<b>61</b>	<b>158</b>	<b>11</b>	<b>136</b>	<b>406</b>
0400. Unclassified, mixed fruits, nuts and seeds	0	0	0	0	0	0	0	0	0
0401. Fruits, fruit compote	85	0	65	269	51	173	34	141	408
040101. Fruits	73	0	38	254	45	169	35	136	425
040102. Fruit compote	12	0	0	88	10	121	26	100	250
0402. Nuts and seeds (+ nut spread)	8	0	0	41	22	41	8	31	124
040201. Nuts, peanuts, seeds	2	0	0	14	5	36	4	30	75
040202. Peanut butter, nut/seeds spread	7	0	0	32	17	39	10	31	122
0403. Olives	0	0	0	0	1	18	7	13	30
<b>05. Dairy products and substitutes</b>	<b>396</b>	<b>46</b>	<b>364</b>	<b>908</b>	<b>93</b>	<b>424</b>	<b>38</b>	<b>393</b>	<b>987</b>
0500. Unclassified and mixed dairy products	5	0	0	0	2	206	37	202	412
0501. Milk, milk beverages and fermented milk beverages	251	0	203	715	65	378	100	291	917
050100. Unclassified or combined milk and milk beverages	4	0	0	0	2	271	155	275	412

Food groups based on GloboDiet classification	mean g/day	P5 g/day	median g/day	P95 g/day	% Con- sumption days	On consumption days			
						mean g/day	P5 g/day	median g/day	P95 g/day
050101. Non-fermented milk and milk beverages	204	0	155	598	58	352	78	283	850
050102. Fermented milk, milk beverages and yoghurt drinks	44	0	0	266	13	310	147	258	561
0502. Milk substitutes and milk substitute products	6	0	0	0	2	271	50	261	519
0503. Yoghurt	43	0	0	218	20	224	53	216	396
0504. Fromage blanc, petits suisses	9	0	0	1	3	217	1	206	500
0505. Cheeses (including spread cheeses)	22	0	15	72	49	45	9	33	113
0506. Cream desserts, puddings (milk based)	41	0	0	192	21	199	80	192	412
0507. Dairy and non-dairy creams, creamers	3	0	0	16	15	18	4	12	38
050700. Unclassified creams	1	0	0	8	6	16	5	12	28
050701. Dairy creams and creamers	2	0	0	13	9	19	3	12	38
050702. Non-dairy creams and creamers	0	0	0	0	0	28	24	30	30
0508. Ice cream and substitutes, sorbet and water ice	16	0	0	78	18	91	42	75	215
050800. Unclassified, combined ice creams/sorbets	1	0	0	0	1	88	65	69	169
050801. Ice cream (milk based)	11	0	0	75	12	94	49	75	183
050803. Sorbet/water ice	4	0	0	28	5	74	35	55	125
<b>06. Cereals and cereal products</b>	<b>224</b>	<b>84</b>	<b>201</b>	<b>424</b>	<b>99</b>	<b>226</b>	<b>70</b>	<b>199</b>	<b>468</b>
0601. Flour, starches, flakes, semolina used as flour	3	0	0	27	9	33	1	15	104
0602. Pasta, rice, other grain	49	0	10	165	34	144	20	112	340
0603. Bread, crisp bread, rusks	152	45	140	295	96	159	45	140	330
060301. Bread	150	45	140	295	94	159	45	140	339
060302. Crispbread, rusks	2	0	0	15	12	18	7	14	30
0604. Breakfast cereals	9	0	0	45	21	44	15	40	80
0605. Dough and pastry (plain puff, short-crust, pizza)	10	0	0	83	7	158	25	164	300
<b>07. Meat, meat products and substitutes</b>	<b>111</b>	<b>27</b>	<b>95</b>	<b>227</b>	<b>94</b>	<b>119</b>	<b>22</b>	<b>100</b>	<b>277</b>
0700. Unclassified and combined meat meat products	6	0	0	59	5	129	21	120	277
0701. Domestic mammals	19	0	0	86	22	86	11	75	193

Food groups based on GloboDiet classification	mean g/day	P5 g/day	median g/day	P95 g/day	% Con- sumption days	On consumption days			
						mean g/day	P5 g/day	median g/day	P95 g/day
070100. Unclassified, mixed and other mammals	4	0	0	33	7	65	8	47	152
070101. Beef	11	0	0	52	14	75	21	58	227
070102. Veal	1	0	0	0	0	124	56	172	172
070103. Pork	13	0	0	75	14	91	11	79	210
070104. Mutton/Lamb	1	0	0	0	1	112	52	105	175
070105. Horse	0	0	0	0	0	0	0	0	0
070107. Rabbit	0	0	0	0	0	21	21	21	21
0702. Poultry	16	0	0	77	17	96	21	75	251
070200. Unclassified and other poultry	0	0	0	0	0	21	21	21	21
070201. Chicken, hen	16	0	0	77	17	97	24	75	251
070202. Turkey, young turkey	0	0	0	0	0	0	0	0	0
070203. Duck	0	0	0	0	0	0	0	0	0
0703. Game	0	0	0	0	0	0	0	0	0
0704. Processed meat	58	0	46	160	73	80	11	60	208
070401. Hot processed meat	37	0	21	118	38	97	10	80	216
070402. Cold processed meat	22	0	16	69	56	39	9	32	107
0705. Offals	0	0	0	0	0	56	32	80	80
0706. Meat substitutes	1	0	0	0	1	71	19	91	100
070601. Hot meal substitutes	1	0	0	0	1	83	42	95	100
070602. Cold meal substitutes	0	0	0	0	0	19	19	19	19
<b>08. Fish, shellfish and amphibians</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>50</b>	<b>8</b>	<b>99</b>	<b>10</b>	<b>76</b>	<b>303</b>
0800. Unclassified and combined fish products	0	0	0	0	0	0	0	0	0
0801. Fish	4	0	0	20	5	82	11	50	280
0802. Crustaceans, molluscs	0	0	0	0	2	28	3	31	71
0803. Fish products, fish in crumbs	3	0	0	0	2	138	39	108	270
<b>09. Eggs and egg products</b>	<b>10</b>	<b>0</b>	<b>0</b>	<b>45</b>	<b>22</b>	<b>45</b>	<b>4</b>	<b>45</b>	<b>135</b>
0901. Eggs	10	0	0	45	22	45	4	45	135
<b>10. Fats and oils</b>	<b>22</b>	<b>3</b>	<b>18</b>	<b>54</b>	<b>94</b>	<b>24</b>	<b>2</b>	<b>20</b>	<b>60</b>
1000. Unclassified and combined fat	2	0	0	12	19	12	1	8	39
1001. Vegetable oils	3	0	0	13	32	9	1	6	31
1002. Butter	1	0	0	10	8	15	1	12	48
1003. Margarines and cooking fats	16	0	13	44	74	22	2	18	52
1004. Other animal fats (including fish oils)	0	0	0	0	2	10	2	6	25
<b>11. Sugar and confectionery</b>	<b>60</b>	<b>0</b>	<b>45</b>	<b>174</b>	<b>86</b>	<b>68</b>	<b>6</b>	<b>49</b>	<b>196</b>
1100. Unclassified or combined confectionery	0	0	0	0	1	12	8	10	20



Food groups based on GloboDiet classification	mean g/day	P5 g/day	median g/day	P95 g/day	% Con- sumption days	On consumption days			
						mean g/day	P5 g/day	median g/day	P95 g/day
1101. Sugar, honey, jam, syrup, sweet sauce	30	0	14	111	57	51	4	35	156
110100. Unclassified and other sugar, honey, jam, syrup, sweet sauce	0	0	0	0	0	150	150	150	150
110101. Sugar	3	0	0	15	25	13	2	8	44
110102. Jam, jelly, marmelade	2	0	0	14	5	30	9	30	60
110103. Honey	1	0	0	3	4	14	3	11	45
110104. Other sweet spreads	2	0	0	21	7	31	10	25	71
110105. Sweet sauce, sweet toppings for desserts	0	0	0	0	1	19	3	15	45
110106. Syrups (incl. from can and for beverages)	21	0	0	96	35	59	13	38	175
1102. Chocolate, candy bars, paste, confetti/flakes	18	0	12	56	53	34	5	25	83
110200. Unclassified and other chocolate confectionary (incl. sauce)	5	0	0	22	29	17	3	14	41
110201. Chocolate tablet	4	0	0	26	11	35	7	24	100
110202. Chocolate candybars	2	0	0	17	5	31	17	28	58
110203. Chocolate spread and chocolate powder	7	0	0	36	18	39	9	30	91
110204. Chocolate confectionary	1	0	0	6	3	25	10	15	53
1103. Confectionary non- chocolate	12	0	4	42	44	27	2	16	75
<b>12. Cakes and sweet biscuits</b>	<b>47</b>	<b>0</b>	<b>34</b>	<b>140</b>	<b>67</b>	<b>69</b>	<b>10</b>	<b>50</b>	<b>182</b>
1201. Cakes, pies, pastries, puddings (non-milk based)	25	0	0	102	31	77	24	60	197
1202. Dry cakes, sweet biscuits	22	0	15	70	52	42	7	30	120
<b>13. Non-alcoholic beverages</b>	<b>1,307</b>	<b>632</b>	<b>1,198</b>	<b>2,443</b>	<b>100</b>	<b>1,314</b>	<b>523</b>	<b>1,200</b>	<b>2,663</b>
1300. Unclassified and combined non-alcoholic drinks	1	0	0	0	0	221	70	300	300
1301. Fruit and vegetable juices	65	0	0	312	23	282	28	213	659
1302. Carbonated/soft/isotonic drinks, diluted syrups	554	0	425	1,621	77	710	167	567	1,777
1303. Coffee, tea and herbal teas	101	0	0	495	30	343	150	267	750
130301. Coffee	30	0	0	248	9	336	125	267	692
130302. Tea	51	0	0	297	15	334	154	275	625
130303. Herbal tea	20	0	0	150	7	319	150	267	683

Food groups based on GloboDiet classification	mean g/day	P5 g/day	median g/day	P95 g/day	% Con- sumption days	On consumption days			
						mean g/day	P5 g/day	median g/day	P95 g/day
130304. Chicory, substitutes	0	0	0	0	0	0	0	0	0
1304. Waters	587	0	481	1,574	85	700	55	570	1,817
<b>14. Alcoholic beverages</b>	<b>51</b>	<b>0</b>	<b>0</b>	<b>280</b>	<b>5</b>	<b>1,150</b>	<b>250</b>	<b>587</b>	<b>5,040</b>
1400. Unclassified, cocktails, punches	1	0	0	0	0	750	750	750	750
1401. Wine, cider, fruit wines	0	0	0	0	0	64	45	45	83
1402. Fortified wines (sherry, porto, vermouth)	0	0	0	0	0	0	0	0	0
1403. Beer	49	0	0	280	4	1,190	250	587	5,040
1404. Spirits, brandy	0	0	0	0	0	0	0	0	0
1405. Aniseed drinks	0	0	0	0	0	0	0	0	0
1406. Liqueurs	0	0	0	0	0	201	201	201	201
<b>15. Condiments, spices, sauces and yeast</b>	<b>34</b>	<b>0</b>	<b>25</b>	<b>109</b>	<b>72</b>	<b>48</b>	<b>4</b>	<b>35</b>	<b>148</b>
1500. Unclassified or combined condiments and sauces	0	0	0	0	0	22	17	25	25
1501. Savory sauces	31	0	22	101	61	52	6	40	160
150100. Other and mixed sauces	9	0	0	42	23	40	5	29	84
150101. Tomato sauces	10	0	0	49	25	41	6	25	149
150102. Dressings, mayonnaises and similar	10	0	0	43	30	33	5	28	76
150103. Mayonnaise based spreads	3	0	0	16	5	59	3	40	199
1503. Spices, herbs and flavourings	0	0	0	0	0	0	0	0	0
1504. Condiments	2	0	0	11	23	10	1	7	32
<b>16. Soups and stocks</b>	<b>12</b>	<b>0</b>	<b>0</b>	<b>93</b>	<b>6</b>	<b>209</b>	<b>62</b>	<b>183</b>	<b>570</b>
1602. Stocks	12	0	0	93	6	209	62	183	570
<b>17. Miscellaneous</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>284</b>	<b>30</b>	<b>61</b>	<b>773</b>
1701. Vegetarian products/dishes	0	0	0	0	0	0	0	0	0
1702. Dietetic products	2	0	0	0	1	284	30	61	773
170201. Artificial sweeteners	0	0	0	0	0	0	0	0	0
170202. Meal substitutes	2	0	0	0	1	284	30	61	773
<b>18. Savoury snacks</b>	<b>32</b>	<b>0</b>	<b>15</b>	<b>120</b>	<b>37</b>	<b>84</b>	<b>12</b>	<b>59</b>	<b>213</b>
1800. Unclassified or combined snacks	0	0	0	0	1	67	50	79	79
1801. Savoury snacks, biscuits and crisps	18	0	1	75	31	59	10	50	152
1802. Savoury filled buns, croissants	14	0	0	75	11	122	46	70	300
<b>19. Ready meals</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
1901. Jarred meals for children	0	0	0	0	0	0	0	0	0

Appendix B Table 5.1.d Food consumption (food groups and food subgroups) of Dutch girls aged 9-18 years (DNFCS 2012-2014), weighted for socio-demographic characteristics, season and day of the week (n=273).

Food groups based on GloboDiet classification	mean g/day	P5 g/day	median g/day	P95 g/day	% Con- sumption days	On consumption days			
						mean g/day	P5 g/day	median g/day	P95 g/day
<b>01. Potatoes and other tubers</b>	<b>73</b>	<b>0</b>	<b>70</b>	<b>205</b>	<b>54</b>	<b>134</b>	<b>37</b>	<b>138</b>	<b>269</b>
0100. Unclassified and other tubers	0	0	0	0	0	39	29	29	50
0101. Potatoes	73	0	70	201	54	134	37	138	269
<b>02. Vegetables</b>	<b>84</b>	<b>0</b>	<b>75</b>	<b>202</b>	<b>78</b>	<b>107</b>	<b>15</b>	<b>98</b>	<b>231</b>
0200. Unclassified, mixed salads/vegetables	4	0	0	37	7	58	12	48	160
0201. Leafy vegetables (except cabbages)	11	0	0	58	22	50	8	36	149
0202. Fruiting vegetables	34	0	21	108	49	69	6	52	170
0203. Root vegetables	10	0	0	73	14	71	3	33	178
0204. Cabbages	14	0	0	87	17	84	2	78	180
0205. Mushrooms	2	0	0	11	7	26	2	12	66
0206. Grain and pod vegetables	2	0	0	7	4	52	1	20	160
0207. Leek, onion, garlic	7	0	0	32	30	22	2	14	63
0208. Stalk vegetables, sprouts	0	0	0	2	4	12	0	5	65
<b>03. Legumes</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>22</b>	<b>3</b>	<b>72</b>	<b>19</b>	<b>56</b>	<b>140</b>
0301. Legumes	2	0	0	22	3	72	19	56	140
<b>04. Fruits, nuts and seeds, olives</b>	<b>115</b>	<b>0</b>	<b>83</b>	<b>283</b>	<b>61</b>	<b>189</b>	<b>25</b>	<b>162</b>	<b>438</b>
0400. Unclassified, mixed fruits, nuts and seeds	0	0	0	0	0	0	0	0	0
0401. Fruits, fruit compote	110	0	82	283	56	198	35	164	438
040101. Fruits	102	0	75	280	53	190	35	162	430
040102. Fruit compote	8	0	0	50	8	107	26	100	270
0402. Nuts and seeds (+ nut spread)	5	0	0	27	14	32	5	24	90
040201. Nuts, peanuts, seeds	1	0	0	7	5	32	4	30	100
040202. Peanut butter, nut/seeds spread	3	0	0	25	10	30	9	22	79
0403. Olives	0	0	0	0	1	8	1	9	12
<b>05. Dairy products and substitutes</b>	<b>305</b>	<b>26</b>	<b>255</b>	<b>751</b>	<b>91</b>	<b>332</b>	<b>27</b>	<b>270</b>	<b>863</b>
0500. Unclassified and mixed dairy products	2	0	0	0	2	107	50	103	202
0501. Milk, milk beverages and fermented milk beverages	201	0	144	623	63	315	27	242	791
050100. Unclassified or combined milk and milk beverages	3	0	0	0	1	249	215	258	275

Food groups based on GloboDiet classification	mean g/day	P5 g/day	median g/day	P95 g/day	% Con- sumption days	On consumption days			
						mean g/day	P5 g/day	median g/day	P95 g/day
050101. Non-fermented milk and milk beverages	152	0	103	571	53	282	26	221	717
050102. Fermented milk, milk beverages and yoghurt drinks	45	0	0	258	16	282	136	206	596
0502. Milk substitutes and milk substitute products	4	0	0	0	2	259	138	227	477
0503. Yoghurt	36	0	0	176	19	196	80	200	349
0504. Fromage blanc, petits suisses	3	0	0	0	3	98	2	80	250
0505. Cheeses (including spread cheeses)	19	0	14	60	54	36	7	31	84
0506. Cream desserts, puddings (milk based)	21	0	0	103	14	151	52	144	258
0507. Dairy and non-dairy creams, creamers	1	0	0	10	9	15	2	10	50
050700. Unclassified creams	1	0	0	0	3	21	2	8	64
050701. Dairy creams and creamers	1	0	0	6	6	13	1	12	28
050702. Non-dairy creams and creamers	0	0	0	0	0	10	7	12	12
0508. Ice cream and substitutes, sorbet and water ice	18	0	0	89	20	89	40	75	183
050800. Unclassified, combined ice creams/sorbets	1	0	0	0	1	68	48	65	112
050801. Ice cream (milk based)	11	0	0	65	13	89	40	75	178
050803. Sorbet/water ice	5	0	0	32	7	77	37	55	200
<b>06. Cereals and cereal products</b>	<b>171</b>	<b>65</b>	<b>168</b>	<b>305</b>	<b>99</b>	<b>173</b>	<b>45</b>	<b>155</b>	<b>343</b>
0601. Flour, starches, flakes, semolina used as flour	2	0	0	19	7	29	1	16	90
0602. Pasta, rice, other grain	33	0	0	146	28	122	16	110	314
0603. Bread, crisp bread, rusks	123	50	118	213	98	126	35	117	240
060301. Bread	118	45	113	210	96	123	35	105	240
060302. Crispbread, rusks	5	0	0	20	27	18	7	14	40
0604. Breakfast cereals	4	0	0	32	12	36	9	30	80
0605. Dough and pastry (plain puff, short-crust, pizza)	8	0	0	78	7	119	23	94	264
<b>07. Meat, meat products and substitutes</b>	<b>80</b>	<b>11</b>	<b>74</b>	<b>165</b>	<b>89</b>	<b>90</b>	<b>19</b>	<b>80</b>	<b>192</b>
0700. Unclassified and combined meat meat products	1	0	0	0	1	91	12	91	176
0701. Domestic mammals	11	0	0	63	19	59	9	56	140

Food groups based on GloboDiet classification	mean g/day	P5 g/day	median g/day	P95 g/day	% Con- sumption days	On consumption days			
						mean g/day	P5 g/day	median g/day	P95 g/day
070100. Unclassified, mixed and other mammals	3	0	0	22	6	52	8	34	180
070101. Beef	6	0	0	43	11	56	15	50	113
070102. Veal	0	0	0	0	0	75	74	75	75
070103. Pork	7	0	0	41	12	61	9	66	130
070104. Mutton/Lamb	1	0	0	0	1	97	52	105	127
070105. Horse	0	0	0	0	0	0	0	0	0
070107. Rabbit	0	0	0	0	0	0	0	0	0
0702. Poultry	12	0	0	57	17	72	16	69	150
070200. Unclassified and other poultry	0	0	0	0	0	0	0	0	0
070201. Chicken, hen	12	0	0	57	16	73	16	70	150
070202. Turkey, young turkey	0	0	0	0	1	52	5	36	172
070203. Duck	0	0	0	0	0	0	0	0	0
0703. Game	0	0	0	0	0	0	0	0	0
0704. Processed meat	47	0	39	127	70	67	11	55	158
070401. Hot processed meat	31	0	16	101	36	83	9	80	160
070402. Cold processed meat	16	0	12	47	54	30	8	22	69
0705. Offals	0	0	0	0	1	26	11	18	60
0706. Meat substitutes	2	0	0	0	3	73	21	75	133
070601. Hot meal substitutes	2	0	0	0	3	76	21	75	133
070602. Cold meal substitutes	0	0	0	0	0	20	15	25	25
<b>08. Fish, shellfish and amphibians</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>48</b>	<b>7</b>	<b>93</b>	<b>16</b>	<b>81</b>	<b>202</b>
0800. Unclassified and combined fish products	0	0	0	0	0	0	0	0	0
0801. Fish	3	0	0	16	5	64	8	36	180
0802. Crustaceans, molluscs	1	0	0	0	1	124	8	27	405
0803. Fish products, fish in crumbs	2	0	0	20	2	90	39	81	201
<b>09. Eggs and egg products</b>	<b>11</b>	<b>0</b>	<b>0</b>	<b>50</b>	<b>24</b>	<b>45</b>	<b>6</b>	<b>45</b>	<b>100</b>
0901. Eggs	11	0	0	50	24	45	6	45	100
<b>10. Fats and oils</b>	<b>17</b>	<b>2</b>	<b>15</b>	<b>39</b>	<b>92</b>	<b>18</b>	<b>2</b>	<b>16</b>	<b>46</b>
1000. Unclassified and combined fat	1	0	0	8	16	8	1	6	27
1001. Vegetable oils	2	0	0	10	32	7	1	5	21
1002. Butter	1	0	0	6	9	10	2	6	37
1003. Margarines and cooking fats	12	0	10	34	75	16	1	13	41
1004. Other animal fats (including fish oils)	0	0	0	0	1	15	3	12	32
<b>11. Sugar and confectionery</b>	<b>46</b>	<b>0</b>	<b>39</b>	<b>121</b>	<b>85</b>	<b>54</b>	<b>5</b>	<b>41</b>	<b>140</b>
1100. Unclassified or combined confectionery	0	0	0	0	1	23	13	17	50

Food groups based on GloboDiet classification	mean g/day	P5 g/day	median g/day	P95 g/day	% Con- sumption days	On consumption days			
						mean g/day	P5 g/day	median g/day	P95 g/day
1101. Sugar, honey, jam, syrup, sweet sauce	22	0	10	80	57	39	2	25	117
110100. Unclassified and other sugar, honey, jam, syrup, sweet sauce	0	0	0	0	0	0	0	0	0
110101. Sugar	2	0	0	11	21	11	1	7	39
110102. Jam, jelly, marmelade	2	0	0	15	8	27	7	25	60
110103. Honey	1	0	0	4	5	17	1	9	65
110104. Other sweet spreads	2	0	0	18	6	37	10	28	104
110105. Sweet sauce, sweet toppings for desserts	0	0	0	0	1	25	7	15	72
110106. Syrups (incl. from can and for beverages)	15	0	0	70	32	45	10	30	121
1102. Chocolate, candy bars, paste, confetti/flakes	15	0	9	52	51	30	5	21	89
110200. Unclassified and other chocolate confectionary (incl. sauce)	3	0	0	15	27	13	3	10	32
110201. Chocolate tablet	3	0	0	17	12	23	5	17	52
110202. Chocolate candybars	3	0	0	19	7	36	17	34	66
110203. Chocolate spread and chocolate powder	5	0	0	33	15	36	7	29	96
110204. Chocolate confectionary	1	0	0	7	3	29	6	20	125
1103. Confectionary non- chocolate	9	0	4	36	48	19	1	11	62
<b>12. Cakes and sweet biscuits</b>	<b>43</b>	<b>0</b>	<b>35</b>	<b>111</b>	<b>70</b>	<b>61</b>	<b>10</b>	<b>45</b>	<b>154</b>
1201. Cakes, pies, pastries, puddings (non-milk based)	21	0	0	78	30	74	19	60	176
1202. Dry cakes, sweet biscuits	21	0	17	60	56	37	10	32	89
<b>13. Non-alcoholic beverages</b>	<b>1,202</b>	<b>567</b>	<b>1,111</b>	<b>2,160</b>	<b>100</b>	<b>1,204</b>	<b>487</b>	<b>1,113</b>	<b>2,367</b>
1300. Unclassified and combined non-alcoholic drinks	1	0	0	0	0	219	10	300	330
1301. Fruit and vegetable juices	65	0	0	352	21	309	76	245	704
1302. Carbonated/soft/isotonic drinks, diluted syrups	425	0	363	1,082	73	582	138	500	1,275
1303. Coffee, tea and herbal teas	146	0	17	583	39	370	150	267	902
130301. Coffee	21	0	0	112	7	284	5	213	800
130302. Tea	82	0	0	429	24	343	150	230	800
130303. Herbal tea	43	0	0	267	14	311	67	260	640

Food groups based on GloboDiet classification	mean g/day	P5 g/day	median g/day	P95 g/day	% Con- sumption days	On consumption days			
						mean g/day	P5 g/day	median g/day	P95 g/day
130304. Chicory, substitutes	0	0	0	0	0	0	0	0	0
1304. Waters	565	0	471	1,450	85	668	50	558	1,713
<b>14. Alcoholic beverages</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>3</b>	<b>280</b>	<b>0</b>	<b>167</b>	<b>1,626</b>
1400. Unclassified, cocktails, punches	2	0	0	0	1	355	250	400	400
1401. Wine, cider, fruit wines	5	0	0	0	1	338	4	167	1,626
1402. Fortified wines (sherry, porto, vermouth)	0	0	0	0	0	0	0	0	0
1403. Beer	0	0	0	0	0	300	300	300	300
1404. Spirits, brandy	0	0	0	0	0	0	0	0	0
1405. Aniseed drinks	0	0	0	0	0	0	0	0	0
1406. Liqueurs	0	0	0	0	1	53	43	51	63
<b>15. Condiments, spices, sauces and yeast</b>	<b>27</b>	<b>0</b>	<b>22</b>	<b>76</b>	<b>72</b>	<b>38</b>	<b>5</b>	<b>28</b>	<b>107</b>
1500. Unclassified or combined condiments and sauces	0	0	0	0	0	14	14	14	14
1501. Savory sauces	26	0	20	73	64	41	8	30	110
150100. Other and mixed sauces	10	0	0	44	25	38	6	28	96
150101. Tomato sauces	7	0	0	40	19	36	7	25	107
150102. Dressings, mayonnaises and similar	7	0	3	28	32	23	4	17	51
150103. Mayonnaise based spreads	2	0	0	20	6	37	10	34	121
1503. Spices, herbs and flavourings	0	0	0	0	0	0	0	0	0
1504. Condiments	1	0	0	9	17	8	1	5	20
<b>16. Soups and stocks</b>	<b>13</b>	<b>0</b>	<b>0</b>	<b>101</b>	<b>8</b>	<b>171</b>	<b>28</b>	<b>175</b>	<b>347</b>
1602. Stocks	13	0	0	101	8	171	28	175	347
<b>17. Miscellaneous</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>472</b>	<b>412</b>	<b>412</b>	<b>541</b>
1701. Vegetarian products/dishes	0	0	0	0	0	0	0	0	0
1702. Dietetic products	2	0	0	0	0	472	412	412	541
170201. Artificial sweeteners	0	0	0	0	0	0	0	0	0
170202. Meal substitutes	2	0	0	0	0	472	412	412	541
<b>18. Savoury snacks</b>	<b>23</b>	<b>0</b>	<b>13</b>	<b>82</b>	<b>38</b>	<b>61</b>	<b>11</b>	<b>48</b>	<b>173</b>
1800. Unclassified or combined snacks	0	0	0	0	0	0	0	0	0
1801. Savoury snacks, biscuits and crisps	14	0	5	50	32	43	10	40	99
1802. Savoury filled buns, croissants	9	0	0	63	9	99	36	72	234
<b>19. Ready meals</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
1901. Jarred meals for children	0	0	0	0	0	0	0	0	0

Appendix B Table 5.1.e Food consumption (food groups and food subgroups) of Dutch men aged 19-50 years (DNFCS 2012-2014), weighted for socio-demographic characteristics, season and day of the week (n=273).

Food groups based on GloboDiet classification	mean g/day	P5 g/day	median g/day	P95 g/day	% Con- sumption days	On consumption days			
						mean g/day	P5 g/day	median g/day	P95 g/day
<b>01. Potatoes and other tubers</b>	<b>84</b>	<b>0</b>	<b>67</b>	<b>236</b>	<b>49</b>	<b>174</b>	<b>37</b>	<b>150</b>	<b>362</b>
0100. Unclassified and other tubers	1	0	0	0	1	96	48	76	148
0101. Potatoes	83	0	67	236	48	174	32	150	362
<b>02. Vegetables</b>	<b>131</b>	<b>24</b>	<b>115</b>	<b>304</b>	<b>90</b>	<b>145</b>	<b>26</b>	<b>124</b>	<b>332</b>
0200. Unclassified, mixed salads/vegetables	13	0	0	81	13	101	24	100	230
0201. Leafy vegetables (except cabbages)	19	0	0	86	27	72	6	48	240
0202. Fruiting vegetables	45	0	28	153	53	84	6	67	245
0203. Root vegetables	11	0	0	81	20	53	4	17	200
0204. Cabbages	19	0	0	113	19	104	4	116	240
0205. Mushrooms	5	0	0	32	15	33	3	22	110
0206. Grain and pod vegetables	2	0	0	6	5	37	2	29	140
0207. Leek, onion, garlic	15	0	7	57	43	33	4	24	96
0208. Stalk vegetables, sprouts	2	0	0	11	7	24	1	7	74
<b>03. Legumes</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>37</b>	<b>4</b>	<b>92</b>	<b>18</b>	<b>101</b>	<b>200</b>
0301. Legumes	3	0	0	37	4	92	18	101	200
<b>04. Fruits, nuts and seeds, olives</b>	<b>97</b>	<b>0</b>	<b>63</b>	<b>319</b>	<b>59</b>	<b>163</b>	<b>13</b>	<b>137</b>	<b>374</b>
0400. Unclassified, mixed fruits, nuts and seeds	0	0	0	0	1	56	50	60	60
0401. Fruits, fruit compote	81	0	34	307	42	193	23	165	375
040101. Fruits	79	0	32	296	41	191	23	165	375
040102. Fruit compote	2	0	0	0	2	96	44	100	200
0402. Nuts and seeds (+ nut spread)	15	0	0	65	29	50	5	39	130
040201. Nuts, peanuts, seeds	8	0	0	50	15	55	3	40	157
040202. Peanut butter, nut/seeds spread	7	0	0	46	16	41	7	31	100
0403. Olives	1	0	0	5	3	28	10	20	60
<b>05. Dairy products and substitutes</b>	<b>351</b>	<b>16</b>	<b>296</b>	<b>854</b>	<b>90</b>	<b>385</b>	<b>34</b>	<b>317</b>	<b>954</b>
0500. Unclassified and mixed dairy products	3	0	0	0	1	214	155	206	258
0501. Milk, milk beverages and fermented milk beverages	198	0	122	728	52	378	58	283	1,004
050100. Unclassified or combined milk and milk beverages	3	0	0	0	1	313	163	275	515



Food groups based on GloboDiet classification	mean g/day	P5 g/day	median g/day	P95 g/day	% Con- sumption days	On consumption days			
						mean g/day	P5 g/day	median g/day	P95 g/day
050101. Non-fermented milk and milk beverages	159	0	57	704	44	358	38	283	1,004
050102. Fermented milk, milk beverages and yoghurt drinks	35	0	0	258	11	326	100	272	687
0502. Milk substitutes and milk substitute products	2	0	0	0	1	240	162	196	547
0503. Yoghurt	46	0	0	216	20	229	125	202	432
0504. Fromage blanc, petits suisses	14	0	0	125	6	219	50	206	500
0505. Cheeses (including spread cheeses)	40	0	31	123	65	63	16	51	154
0506. Cream desserts, puddings (milk based)	29	0	0	180	13	213	69	200	416
0507. Dairy and non-dairy creams, creamers	9	0	0	37	30	28	4	20	72
050700. Unclassified creams	6	0	0	24	21	27	5	18	72
050701. Dairy creams and creamers	2	0	0	16	10	23	4	19	50
050702. Non-dairy creams and creamers	1	0	0	0	1	49	23	40	104
0508. Ice cream and substitutes, sorbet and water ice	10	0	0	65	11	100	40	100	165
050800. Unclassified, combined ice creams/sorbets	0	0	0	0	0	130	130	130	130
050801. Ice cream (milk based)	9	0	0	63	9	101	40	100	150
050803. Sorbet/water ice	1	0	0	0	1	89	50	55	165
<b>06. Cereals and cereal products</b>	<b>250</b>	<b>88</b>	<b>248</b>	<b>424</b>	<b>97</b>	<b>258</b>	<b>70</b>	<b>245</b>	<b>500</b>
0601. Flour, starches, flakes, semolina used as flour	1	0	0	8	7	19	1	9	57
0602. Pasta, rice, other grain	66	0	45	223	39	168	25	162	350
0603. Bread, crisp bread, rusks	165	45	158	295	94	175	60	168	341
060301. Bread	161	45	155	285	93	174	60	162	341
060302. Crispbread, rusks	3	0	0	21	15	23	8	14	56
0604. Breakfast cereals	7	0	0	41	14	50	15	40	120
0605. Dough and pastry (plain puff, short-crust, pizza)	11	0	0	97	6	175	23	176	312
<b>07. Meat, meat products and substitutes</b>	<b>131</b>	<b>32</b>	<b>116</b>	<b>287</b>	<b>94</b>	<b>141</b>	<b>32</b>	<b>117</b>	<b>331</b>
0700. Unclassified and combined meat meat products	3	0	0	18	3	99	5	120	176
0701. Domestic mammals	27	0	0	112	27	100	16	78	208

Food groups based on GloboDiet classification	mean g/day	P5 g/day	median g/day	P95 g/day	% Con- sumption days	On consumption days			
						mean g/day	P5 g/day	median g/day	P95 g/day
070100. Unclassified, mixed and other mammals	8	0	0	48	12	66	17	62	128
070101. Beef	16	0	0	87	16	106	29	80	277
070102. Veal	1	0	0	0	0	122	68	172	172
070103. Pork	16	0	0	91	14	120	10	100	315
070104. Mutton/Lamb	2	0	0	0	3	88	41	75	178
070105. Horse	0	0	0	0	0	0	0	0	0
070107. Rabbit	0	0	0	0	0	109	109	109	109
0702. Poultry	26	0	0	125	26	102	25	81	277
070200. Unclassified and other poultry	1	0	0	0	0	344	344	344	344
070201. Chicken, hen	23	0	0	115	24	97	25	80	224
070202. Turkey, young turkey	1	0	0	0	1	89	38	38	277
070203. Duck	1	0	0	0	1	225	113	277	277
0703. Game	0	0	0	0	0	0	0	0	0
0704. Processed meat	55	0	44	164	70	78	11	53	211
070401. Hot processed meat	30	0	0	121	29	104	8	101	210
070402. Cold processed meat	25	0	20	70	56	44	11	38	114
0705. Offals	0	0	0	0	0	106	32	105	140
0706. Meat substitutes	3	0	0	0	2	147	75	141	300
070601. Hot meal substitutes	3	0	0	0	2	134	71	141	300
070602. Cold meal substitutes	0	0	0	0	0	61	61	61	61
<b>08. Fish, shellfish and amphibians</b>	<b>14</b>	<b>0</b>	<b>0</b>	<b>79</b>	<b>11</b>	<b>127</b>	<b>25</b>	<b>100</b>	<b>280</b>
0800. Unclassified and combined fish products	0	0	0	0	0	0	0	0	0
0801. Fish	9	0	0	68	8	110	17	95	280
0802. Crustaceans, molluscs	1	0	0	0	2	60	18	41	158
0803. Fish products, fish in crumbs	4	0	0	0	2	189	51	135	500
<b>09. Eggs and egg products</b>	<b>10</b>	<b>0</b>	<b>0</b>	<b>50</b>	<b>19</b>	<b>56</b>	<b>7</b>	<b>45</b>	<b>135</b>
0901. Eggs	10	0	0	50	19	56	7	45	135
<b>10. Fats and oils</b>	<b>28</b>	<b>4</b>	<b>26</b>	<b>63</b>	<b>96</b>	<b>29</b>	<b>4</b>	<b>24</b>	<b>72</b>
1000. Unclassified and combined fat	2	0	0	11	25	9	2	5	36
1001. Vegetable oils	5	0	2	19	45	11	1	7	31
1002. Butter	2	0	0	14	11	18	0	10	63
1003. Margarines and cooking fats	19	0	16	52	74	25	3	21	62
1004. Other animal fats (including fish oils)	0	0	0	0	1	12	2	14	20
<b>11. Sugar and confectionery</b>	<b>43</b>	<b>0</b>	<b>33</b>	<b>112</b>	<b>79</b>	<b>56</b>	<b>5</b>	<b>42</b>	<b>153</b>
1100. Unclassified or combined confectionery	0	0	0	0	2	25	10	28	50

Food groups based on GloboDiet classification	mean g/day	P5 g/day	median g/day	P95 g/day	% Con- sumption days	On consumption days			
						mean g/day	P5 g/day	median g/day	P95 g/day
1101. Sugar, honey, jam, syrup, sweet sauce	22	0	9	74	54	41	4	30	128
110100. Unclassified and other sugar, honey, jam, syrup, sweet sauce	0	0	0	0	0	0	0	0	0
110101. Sugar	8	0	0	36	34	23	2	15	70
110102. Jam, jelly, marmelade	5	0	0	35	14	36	5	30	77
110103. Honey	1	0	0	10	4	31	3	26	54
110104. Other sweet spreads	3	0	0	21	6	40	10	37	119
110105. Sweet sauce, sweet toppings for desserts	0	0	0	0	2	19	2	6	75
110106. Syrups (incl. from can and for beverages)	5	0	0	33	10	52	8	35	175
1102. Chocolate, candy bars, paste, confetti/flakes	15	0	7	54	41	37	7	30	103
110200. Unclassified and other chocolate confectionary (incl. sauce)	4	0	0	23	20	20	5	15	50
110201. Chocolate tablet	3	0	0	20	10	37	7	25	105
110202. Chocolate candybars	2	0	0	25	6	43	17	50	66
110203. Chocolate spread and chocolate powder	4	0	0	30	9	42	13	36	72
110204. Chocolate confectionary	1	0	0	12	3	43	4	40	105
1103. Confectionary non- chocolate	6	0	0	30	24	25	1	14	80
<b>12. Cakes and sweet biscuits</b>	<b>40</b>	<b>0</b>	<b>28</b>	<b>139</b>	<b>52</b>	<b>77</b>	<b>14</b>	<b>58</b>	<b>214</b>
1201. Cakes, pies, pastries, puddings (non-milk based)	22	0	0	101	25	90	28	75	226
1202. Dry cakes, sweet biscuits	18	0	5	80	37	49	10	39	130
<b>13. Non-alcoholic beverages</b>	<b>1,909</b>	<b>817</b>	<b>1,796</b>	<b>3,277</b>	<b>100</b>	<b>1,911</b>	<b>725</b>	<b>1,748</b>	<b>3,570</b>
1300. Unclassified and combined non-alcoholic drinks	11	0	0	0	2	505	6	330	1,320
1301. Fruit and vegetable juices	64	0	0	283	25	265	18	245	553
1302. Carbonated/soft/isotonic drinks, diluted syrups	442	0	306	1,405	60	735	192	580	1,823
1303. Coffee, tea and herbal teas	731	0	698	1,642	87	848	175	750	1,877
130301. Coffee	519	0	455	1,303	73	719	158	650	1,493
130302. Tea	175	0	0	796	35	521	165	400	1,375
130303. Herbal tea	37	0	0	216	10	390	100	233	917

Food groups based on GloboDiet classification	mean g/day	P5 g/day	median g/day	P95 g/day	% Con- sumption days	On consumption days			
						mean g/day	P5 g/day	median g/day	P95 g/day
130304. Chicory, substitutes	0	0	0	0	0	0	0	0	0
1304. Waters	660	0	472	2,221	77	844	59	640	2,350
<b>14. Alcoholic beverages</b>	<b>312</b>	<b>0</b>	<b>75</b>	<b>1,350</b>	<b>41</b>	<b>774</b>	<b>63</b>	<b>500</b>	<b>2,333</b>
1400. Unclassified, cocktails, punches	1	0	0	0	1	90	2	40	190
1401. Wine, cider, fruit wines	34	0	0	225	14	252	63	207	500
1402. Fortified wines (sherry, porto, vermouth)	2	0	0	0	1	104	0	86	215
1403. Beer	271	0	0	1,350	28	977	300	600	2,400
1404. Spirits, brandy	4	0	0	23	4	92	11	57	285
1405. Aniseed drinks	0	0	0	0	0	0	0	0	0
1406. Liqueurs	0	0	0	0	1	44	13	30	83
<b>15. Condiments, spices, sauces and yeast</b>	<b>54</b>	<b>2</b>	<b>40</b>	<b>135</b>	<b>80</b>	<b>68</b>	<b>8</b>	<b>46</b>	<b>208</b>
1500. Unclassified or combined condiments and sauces	1	0	0	0	2	85	12	62	234
1501. Savory sauces	47	0	32	131	65	73	8	52	218
150100. Other and mixed sauces	17	0	0	80	27	62	6	43	160
150101. Tomato sauces	10	0	0	56	22	48	7	28	116
150102. Dressings, mayonnaises and similar	13	0	5	47	32	39	8	30	102
150103. Mayonnaise based spreads	7	0	0	60	11	66	7	40	168
1503. Spices, herbs and flavourings	0	0	0	0	0	7	1	12	12
1504. Condiments	5	0	1	22	34	15	1	11	44
<b>16. Soups and stocks</b>	<b>18</b>	<b>0</b>	<b>0</b>	<b>108</b>	<b>11</b>	<b>178</b>	<b>20</b>	<b>180</b>	<b>351</b>
1602. Stocks	18	0	0	108	11	178	20	180	351
<b>17. Miscellaneous</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>175</b>	<b>28</b>	<b>125</b>	<b>292</b>
1701. Vegetarian products/dishes	0	0	0	0	0	125	125	125	125
1702. Dietetic products	2	0	0	0	1	187	28	258	292
170201. Artificial sweeteners	0	0	0	0	0	0	0	0	0
170202. Meal substitutes	2	0	0	0	1	187	28	258	292
<b>18. Savoury snacks</b>	<b>33</b>	<b>0</b>	<b>13</b>	<b>113</b>	<b>41</b>	<b>82</b>	<b>10</b>	<b>63</b>	<b>220</b>
1800. Unclassified or combined snacks	0	0	0	0	0	11	11	11	11
1801. Savoury snacks, biscuits and crisps	16	0	0	81	28	58	10	49	150
1802. Savoury filled buns, croissants	17	0	0	88	16	104	17	80	290
<b>19. Ready meals</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
1901. Jarred meals for children	0	0	0	0	0	0	0	0	0

Appendix B Table 5.1.f Food consumption (food groups and food subgroups) of Dutch women aged 19-50 years (DNFCS 2012-2014), weighted for socio-demographic characteristics, season and day of the week (n=259).

Food groups based on GloboDiet classification	mean g/day	P5 g/day	median g/day	P95 g/day	% Con- sumption days	On consumption days			
						mean g/day	P5 g/day	median g/day	P95 g/day
<b>01. Potatoes and other tubers</b>	<b>63</b>	<b>0</b>	<b>60</b>	<b>194</b>	<b>44</b>	<b>141</b>	<b>50</b>	<b>140</b>	<b>276</b>
0100. Unclassified and other tubers	0	0	0	0	0	0	0	0	0
0101. Potatoes	63	0	60	194	44	141	50	140	276
<b>02. Vegetables</b>	<b>128</b>	<b>9</b>	<b>121</b>	<b>274</b>	<b>87</b>	<b>149</b>	<b>21</b>	<b>124</b>	<b>345</b>
0200. Unclassified, mixed salads/vegetables	7	0	0	50	10	70	13	50	200
0201. Leafy vegetables (except cabbages)	22	0	0	113	31	73	7	53	225
0202. Fruiting vegetables	47	0	30	158	54	87	8	63	225
0203. Root vegetables	12	0	0	81	20	62	2	26	300
0204. Cabbages	17	0	0	94	18	94	4	84	219
0205. Mushrooms	4	0	0	23	13	30	2	23	124
0206. Grain and pod vegetables	5	0	0	40	7	73	1	50	265
0207. Leek, onion, garlic	12	0	5	48	39	31	3	20	98
0208. Stalk vegetables, sprouts	2	0	0	6	7	22	1	7	94
<b>03. Legumes</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>25</b>	<b>4</b>	<b>90</b>	<b>12</b>	<b>67</b>	<b>358</b>
0301. Legumes	4	0	0	25	4	90	12	67	358
<b>04. Fruits, nuts and seeds, olives</b>	<b>115</b>	<b>0</b>	<b>75</b>	<b>382</b>	<b>60</b>	<b>191</b>	<b>17</b>	<b>149</b>	<b>494</b>
0400. Unclassified, mixed fruits, nuts and seeds	0	0	0	0	0	35	25	25	50
0401. Fruits, fruit compote	107	0	70	363	51	207	21	162	492
040101. Fruits	103	0	65	356	49	208	20	162	478
040102. Fruit compote	4	0	0	25	4	114	21	100	250
0402. Nuts and seeds (+ nut spread)	7	0	0	35	22	33	4	30	73
040201. Nuts, peanuts, seeds	4	0	0	30	14	31	2	27	100
040202. Peanut butter, nut/seeds spread	3	0	0	17	12	27	5	31	62
0403. Olives	1	0	0	0	2	29	1	9	135
<b>05. Dairy products and substitutes</b>	<b>337</b>	<b>27</b>	<b>299</b>	<b>799</b>	<b>93</b>	<b>362</b>	<b>31</b>	<b>306</b>	<b>898</b>
0500. Unclassified and mixed dairy products	2	0	0	0	1	197	100	250	270
0501. Milk, milk beverages and fermented milk beverages	197	0	138	567	58	341	40	282	786
050100. Unclassified or combined milk and milk beverages	3	0	0	0	1	254	67	283	412

Food groups based on GloboDiet classification	mean g/day	P5 g/day	median g/day	P95 g/day	% Con- sumption days	On consumption days			
						mean g/day	P5 g/day	median g/day	P95 g/day
050101. Non-fermented milk and milk beverages	156	0	107	523	49	317	26	275	765
050102. Fermented milk, milk beverages and yoghurt drinks	38	0	0	270	13	289	65	258	566
0502. Milk substitutes and milk substitute products	6	0	0	22	3	178	44	163	408
0503. Yoghurt	61	0	0	250	26	237	101	216	437
0504. Fromage blanc, petits suisses	12	0	0	77	7	182	25	155	500
0505. Cheeses (including spread cheeses)	32	0	22	97	66	50	11	37	126
0506. Cream desserts, puddings (milk based)	13	0	0	117	7	182	79	158	330
0507. Dairy and non-dairy creams, creamers	5	0	0	26	26	20	2	16	62
050700. Unclassified creams	3	0	0	20	19	18	2	12	51
050701. Dairy creams and creamers	2	0	0	15	8	25	3	20	62
050702. Non-dairy creams and creamers	0	0	0	0	0	18	8	12	62
0508. Ice cream and substitutes, sorbet and water ice	7	0	0	50	9	80	32	75	150
050800. Unclassified, combined ice creams/sorbets	0	0	0	0	1	44	40	40	50
050801. Ice cream (milk based)	6	0	0	50	7	86	32	75	150
050803. Sorbet/water ice	1	0	0	0	2	55	32	50	100
<b>06. Cereals and cereal products</b>	<b>179</b>	<b>50</b>	<b>179</b>	<b>313</b>	<b>98</b>	<b>184</b>	<b>50</b>	<b>175</b>	<b>350</b>
0601. Flour, starches, flakes, semolina used as flour	2	0	0	25	9	27	1	12	72
0602. Pasta, rice, other grain	45	0	16	160	36	126	18	121	267
0603. Bread, crisp bread, rusks	117	35	118	213	94	124	35	120	244
060301. Bread	111	25	105	210	89	126	35	120	244
060302. Crispbread, rusks	6	0	0	25	27	23	7	20	56
0604. Breakfast cereals	7	0	0	39	17	43	15	40	80
0605. Dough and pastry (plain puff, short-crust, pizza)	7	0	0	74	6	128	6	135	220
<b>07. Meat, meat products and substitutes</b>	<b>88</b>	<b>0</b>	<b>79</b>	<b>177</b>	<b>86</b>	<b>101</b>	<b>16</b>	<b>86</b>	<b>235</b>
0700. Unclassified and combined meat meat products	3	0	0	0	2	112	29	113	240
0701. Domestic mammals	15	0	0	70	20	74	12	58	172

Food groups based on GloboDiet classification	mean g/day	P5 g/day	median g/day	P95 g/day	% Con- sumption days	On consumption days			
						mean g/day	P5 g/day	median g/day	P95 g/day
070100. Unclassified, mixed and other mammals	3	0	0	25	6	47	10	49	106
070101. Beef	11	0	0	53	15	76	19	73	169
070102. Veal	0	0	0	0	0	56	11	75	75
070103. Pork	11	0	0	63	13	85	18	75	176
070104. Mutton/Lamb	1	0	0	0	1	46	30	41	75
070105. Horse	0	0	0	0	0	0	0	0	0
070107. Rabbit	0	0	0	0	0	0	0	0	0
0702. Poultry	14	0	0	80	19	74	17	72	172
070200. Unclassified and other poultry	0	0	0	0	0	0	0	0	0
070201. Chicken, hen	13	0	0	80	18	72	17	64	172
070202. Turkey, young turkey	1	0	0	0	1	106	75	109	113
070203. Duck	0	0	0	0	0	0	0	0	0
0703. Game	0	0	0	0	0	56	56	56	56
0704. Processed meat	43	0	33	127	63	68	10	47	189
070401. Hot processed meat	26	0	0	104	30	88	7	80	197
070402. Cold processed meat	16	0	12	48	51	32	10	24	72
0705. Offals	1	0	0	0	0	150	150	150	150
0706. Meat substitutes	1	0	0	0	2	60	10	71	122
070601. Hot meal substitutes	1	0	0	0	1	82	26	90	120
070602. Cold meal substitutes	0	0	0	0	1	13	10	10	32
<b>08. Fish, shellfish and amphibians</b>	<b>14</b>	<b>0</b>	<b>0</b>	<b>87</b>	<b>14</b>	<b>99</b>	<b>10</b>	<b>100</b>	<b>240</b>
0800. Unclassified and combined fish products	0	0	0	0	0	94	94	94	94
0801. Fish	9	0	0	78	11	84	13	77	174
0802. Crustaceans, molluscs	1	0	0	0	2	48	10	38	135
0803. Fish products, fish in crumbs	3	0	0	7	3	116	1	109	280
<b>09. Eggs and egg products</b>	<b>10</b>	<b>0</b>	<b>0</b>	<b>52</b>	<b>23</b>	<b>43</b>	<b>4</b>	<b>45</b>	<b>100</b>
0901. Eggs	10	0	0	52	23	43	4	45	100
<b>10. Fats and oils</b>	<b>18</b>	<b>1</b>	<b>16</b>	<b>40</b>	<b>92</b>	<b>19</b>	<b>3</b>	<b>17</b>	<b>45</b>
1000. Unclassified and combined fat	1	0	0	8	18	8	1	6	24
1001. Vegetable oils	2	0	0	11	30	8	1	5	23
1002. Butter	2	0	0	11	13	12	1	10	26
1003. Margarines and cooking fats	13	0	10	35	72	18	2	14	44
1004. Other animal fats (including fish oils)	0	0	0	0	1	7	4	6	22
<b>11. Sugar and confectionery</b>	<b>31</b>	<b>0</b>	<b>23</b>	<b>93</b>	<b>72</b>	<b>43</b>	<b>4</b>	<b>31</b>	<b>134</b>
1100. Unclassified or combined confectionery	1	0	0	0	1	39	16	20	102

Food groups based on GloboDiet classification	mean g/day	P5 g/day	median g/day	P95 g/day	% Con- sumption days	On consumption days			
						mean g/day	P5 g/day	median g/day	P95 g/day
1101. Sugar, honey, jam, syrup, sweet sauce	16	0	6	75	47	33	3	22	94
110100. Unclassified and other sugar, honey, jam, syrup, sweet sauce	0	0	0	0	0	0	0	0	0
110101. Sugar	4	0	0	24	25	17	2	11	56
110102. Jam, jelly, marmelade	2	0	0	15	8	29	5	24	71
110103. Honey	1	0	0	6	5	15	3	13	34
110104. Other sweet spreads	3	0	0	15	8	32	10	26	80
110105. Sweet sauce, sweet toppings for desserts	0	0	0	0	1	60	30	30	94
110106. Syrups (incl. from can and for beverages)	5	0	0	40	12	45	5	28	146
1102. Chocolate, candy bars, paste, confetti/flakes	9	0	0	41	31	30	4	21	90
110200. Unclassified and other chocolate confectionary (incl. sauce)	3	0	0	18	15	16	3	10	50
110201. Chocolate tablet	3	0	0	20	9	30	8	21	64
110202. Chocolate candybars	1	0	0	9	4	29	17	20	90
110203. Chocolate spread and chocolate powder	2	0	0	18	7	31	3	26	61
110204. Chocolate confectionary	1	0	0	0	2	40	8	27	200
1103. Confectionary non- chocolate	6	0	0	21	30	18	1	8	45
<b>12. Cakes and sweet biscuits</b>	<b>33</b>	<b>0</b>	<b>26</b>	<b>89</b>	<b>57</b>	<b>58</b>	<b>10</b>	<b>43</b>	<b>144</b>
1201. Cakes, pies, pastries, puddings (non-milk based)	18	0	0	75	26	69	25	58	149
1202. Dry cakes, sweet biscuits	15	0	7	50	40	37	7	30	97
<b>13. Non-alcoholic beverages</b>	<b>2,035</b>	<b>1,032</b>	<b>1,847</b>	<b>3,569</b>	<b>100</b>	<b>2,039</b>	<b>933</b>	<b>1,860</b>	<b>3,660</b>
1300. Unclassified and combined non-alcoholic drinks	3	0	0	0	1	359	170	300	880
1301. Fruit and vegetable juices	52	0	0	245	19	273	62	220	563
1302. Carbonated/soft/isotonic drinks, diluted syrups	294	0	196	957	55	543	170	440	1,327
1303. Coffee, tea and herbal teas	855	0	792	2,243	86	989	200	852	2,342
130301. Coffee	285	0	162	958	55	518	127	440	1,120
130302. Tea	360	0	167	1,333	50	725	167	500	1,867



Food groups based on GloboDiet classification	mean g/day	P5 g/day	median g/day	P95 g/day	% Con- sumption days	On consumption days			
						mean g/day	P5 g/day	median g/day	P95 g/day
130303. Herbal tea	209	0	0	1,160	28	754	190	533	2,400
130304. Chicory, substitutes	1	0	0	0	0	215	213	213	217
1304. Waters	832	26	675	2,201	88	947	64	745	2,592
<b>14. Alcoholic beverages</b>	<b>61</b>	<b>0</b>	<b>0</b>	<b>343</b>	<b>17</b>	<b>365</b>	<b>40</b>	<b>300</b>	<b>900</b>
1400. Unclassified, cocktails, punches	1	0	0	0	1	175	24	250	458
1401. Wine, cider, fruit wines	31	0	0	199	12	284	63	250	667
1402. Fortified wines (sherry, porto, vermouth)	0	0	0	0	0	0	0	0	0
1403. Beer	26	0	0	150	4	589	192	300	1,530
1404. Spirits, brandy	1	0	0	0	1	59	37	45	109
1405. Aniseed drinks	0	0	0	0	0	60	60	60	60
1406. Liqueurs	2	0	0	0	2	94	13	66	253
<b>15. Condiments, spices, sauces and yeast</b>	<b>36</b>	<b>0</b>	<b>27</b>	<b>101</b>	<b>73</b>	<b>50</b>	<b>3</b>	<b>36</b>	<b>143</b>
1500. Unclassified or combined condiments and sauces	0	0	0	0	1	33	13	40	49
1501. Savory sauces	33	0	24	98	60	56	5	40	149
150100. Other and mixed sauces	12	0	0	54	27	44	3	31	110
150101. Tomato sauces	6	0	0	35	16	39	5	28	109
150102. Dressings, mayonnaises and similar	8	0	0	35	30	28	4	23	70
150103. Mayonnaise based spreads	7	0	0	50	13	52	10	32	152
1503. Spices, herbs and flavourings	0	0	0	0	0	3	3	3	3
1504. Condiments	3	0	0	11	26	11	1	7	35
<b>16. Soups and stocks</b>	<b>24</b>	<b>0</b>	<b>0</b>	<b>133</b>	<b>13</b>	<b>182</b>	<b>48</b>	<b>179</b>	<b>304</b>
1602. Stocks	24	0	0	133	13	182	48	179	304
<b>17. Miscellaneous</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>295</b>	<b>30</b>	<b>258</b>	<b>515</b>
1701. Vegetarian products/dishes	0	0	0	0	0	0	0	0	0
1702. Dietetic products	5	0	0	0	2	295	30	258	515
170201. Artificial sweeteners	0	0	0	0	0	0	0	0	0
170202. Meal substitutes	5	0	0	0	2	295	30	258	515
<b>18. Savoury snacks</b>	<b>16</b>	<b>0</b>	<b>0</b>	<b>70</b>	<b>27</b>	<b>62</b>	<b>10</b>	<b>42</b>	<b>180</b>
1800. Unclassified or combined snacks	0	0	0	0	0	0	0	0	0
1801. Savoury snacks, biscuits and crisps	8	0	0	40	20	40	6	40	100
1802. Savoury filled buns, croissants	8	0	0	55	9	94	36	72	213
<b>19. Ready meals</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
1901. Jarred meals for children	0	0	0	0	0	0	0	0	0

Appendix B Table 5.1.g Food consumption (food groups and food subgroups) of Dutch men aged 51-79 years (DNFCS 2012-2014), weighted for socio-demographic characteristics, season and day of the week (n=281).

Food groups based on GloboDiet classification	mean g/day	P5 g/day	median g/day	P95 g/day	% Con- sumption days	On consumption days			
						mean g/day	P5 g/day	median g/day	P95 g/day
<b>01. Potatoes and other tubers</b>	<b>94</b>	<b>0</b>	<b>73</b>	<b>240</b>	<b>56</b>	<b>171</b>	<b>68</b>	<b>143</b>	<b>308</b>
0100. Unclassified and other tubers	0	0	0	0	0	166	166	166	166
0101. Potatoes	93	0	73	240	56	171	68	143	308
<b>02. Vegetables</b>	<b>148</b>	<b>21</b>	<b>126</b>	<b>304</b>	<b>88</b>	<b>167</b>	<b>27</b>	<b>152</b>	<b>375</b>
0200. Unclassified, mixed salads/vegetables	13	0	0	81	14	95	19	75	228
0201. Leafy vegetables (except cabbages)	27	0	0	117	25	102	3	98	243
0202. Fruiting vegetables	46	0	22	186	46	98	6	76	281
0203. Root vegetables	14	0	0	95	22	61	5	28	250
0204. Cabbages	24	0	0	122	21	117	5	103	300
0205. Mushrooms	2	0	0	17	8	26	2	13	62
0206. Grain and pod vegetables	4	0	0	19	5	78	1	38	285
0207. Leek, onion, garlic	14	0	6	58	39	37	3	28	112
0208. Stalk vegetables, sprouts	3	0	0	6	9	37	2	7	255
<b>03. Legumes</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>50</b>	<b>4</b>	<b>139</b>	<b>61</b>	<b>120</b>	<b>230</b>
0301. Legumes	5	0	0	50	4	139	61	120	230
<b>04. Fruits, nuts and seeds, olives</b>	<b>134</b>	<b>0</b>	<b>97</b>	<b>379</b>	<b>67</b>	<b>194</b>	<b>16</b>	<b>165</b>	<b>435</b>
0400. Unclassified, mixed fruits, nuts and seeds	1	0	0	0	2	88	25	75	250
0401. Fruits, fruit compote	122	0	81	354	59	202	23	169	435
040101. Fruits	114	0	75	332	56	200	16	169	435
040102. Fruit compote	8	0	0	50	5	139	26	108	300
0402. Nuts and seeds (+ nut spread)	11	0	0	50	21	51	5	32	154
040201. Nuts, peanuts, seeds	7	0	0	38	13	49	5	30	100
040202. Peanut butter, nut/seeds spread	4	0	0	31	9	42	15	31	104
0403. Olives	0	0	0	0	2	20	4	13	40
<b>05. Dairy products and substitutes</b>	<b>387</b>	<b>58</b>	<b>361</b>	<b>875</b>	<b>96</b>	<b>404</b>	<b>40</b>	<b>354</b>	<b>892</b>
0500. Unclassified and mixed dairy products	4	0	0	0	2	225	103	144	450
0501. Milk, milk beverages and fermented milk beverages	228	0	204	657	62	364	73	283	773
050100. Unclassified or combined milk and milk beverages	1	0	0	0	1	188	26	215	531

Food groups based on GloboDiet classification	mean g/day	P5 g/day	median g/day	P95 g/day	% Con- sumption days	On consumption days			
						mean g/day	P5 g/day	median g/day	P95 g/day
050101. Non-fermented milk and milk beverages	164	0	107	530	48	345	33	283	820
050102. Fermented milk, milk beverages and yoghurt drinks	63	0	0	384	18	337	128	272	561
0502. Milk substitutes and milk substitute products	4	0	0	0	2	220	50	262	364
0503. Yoghurt	59	0	0	243	29	204	50	200	356
0504. Fromage blanc, petits suisses	5	0	0	35	4	138	49	150	200
0505. Cheeses (including spread cheeses)	39	1	31	97	77	51	15	40	124
0506. Cream desserts, puddings (milk based)	28	0	0	167	15	192	77	192	361
0507. Dairy and non-dairy creams, creamers	9	0	0	36	35	28	3	24	73
050700. Unclassified creams	6	0	0	31	28	24	3	23	50
050701. Dairy creams and creamers	3	0	0	16	11	27	3	20	84
050702. Non-dairy creams and creamers	0	0	0	0	0	10	10	10	10
0508. Ice cream and substitutes, sorbet and water ice	11	0	0	62	12	89	32	83	180
050800. Unclassified, combined ice creams/sorbets	0	0	0	0	0	113	79	100	158
050801. Ice cream (milk based)	10	0	0	58	11	89	32	83	180
050803. Sorbet/water ice	0	0	0	0	1	56	50	55	70
<b>06. Cereals and cereal products</b>	<b>208</b>	<b>91</b>	<b>189</b>	<b>374</b>	<b>98</b>	<b>209</b>	<b>67</b>	<b>179</b>	<b>459</b>
0601. Flour, starches, flakes, semolina used as flour	2	0	0	6	10	18	1	7	120
0602. Pasta, rice, other grain	54	0	12	220	33	157	18	145	365
0603. Bread, crisp bread, rusks	143	54	137	258	97	148	50	140	280
060301. Bread	138	35	130	258	95	146	60	140	280
060302. Crispbread, rusks	5	0	0	21	27	19	10	20	36
0604. Breakfast cereals	6	0	0	38	14	41	10	35	80
0605. Dough and pastry (plain puff, short-crust, pizza)	3	0	0	0	3	139	14	129	296
<b>07. Meat, meat products and substitutes</b>	<b>122</b>	<b>39</b>	<b>110</b>	<b>226</b>	<b>95</b>	<b>127</b>	<b>22</b>	<b>113</b>	<b>280</b>
0700. Unclassified and combined meat meat products	1	0	0	0	1	176	53	172	247
0701. Domestic mammals	23	0	0	88	27	86	12	73	210

Food groups based on GloboDiet classification	mean g/day	P5 g/day	median g/day	P95 g/day	% Con- sumption days	On consumption days			
						mean g/day	P5 g/day	median g/day	P95 g/day
070100. Unclassified, mixed and other mammals	3	0	0	20	5	54	17	40	147
070101. Beef	19	0	0	87	20	91	18	75	180
070102. Veal	0	0	0	0	1	76	74	79	79
070103. Pork	19	0	0	86	21	93	9	79	227
070104. Mutton/Lamb	1	0	0	0	1	100	46	125	125
070105. Horse	0	0	0	0	0	125	125	125	125
070107. Rabbit	0	0	0	0	0	0	0	0	0
0702. Poultry	17	0	0	64	22	77	19	72	172
070200. Unclassified and other poultry	0	0	0	0	0	73	48	77	77
070201. Chicken, hen	16	0	0	63	21	75	18	66	171
070202. Turkey, young turkey	1	0	0	0	0	175	172	172	200
070203. Duck	1	0	0	0	1	101	75	122	122
0703. Game	0	0	0	0	0	150	150	150	150
0704. Processed meat	60	0	48	152	79	75	11	44	219
070401. Hot processed meat	31	0	4	134	32	95	7	80	265
070402. Cold processed meat	29	0	25	75	69	42	11	33	100
0705. Offals	0	0	0	0	0	17	11	16	21
0706. Meat substitutes	1	0	0	0	1	51	10	31	100
070601. Hot meal substitutes	1	0	0	0	1	61	10	81	100
070602. Cold meal substitutes	0	0	0	0	0	31	31	31	31
<b>08. Fish, shellfish and amphibians</b>	<b>19</b>	<b>0</b>	<b>0</b>	<b>100</b>	<b>16</b>	<b>119</b>	<b>15</b>	<b>100</b>	<b>280</b>
0800. Unclassified and combined fish products	0	0	0	0	0	0	0	0	0
0801. Fish	16	0	0	100	15	117	15	97	280
0802. Crustaceans, molluscs	2	0	0	0	2	69	10	75	138
0803. Fish products, fish in crumbs	1	0	0	0	1	76	15	81	150
<b>09. Eggs and egg products</b>	<b>19</b>	<b>0</b>	<b>6</b>	<b>68</b>	<b>33</b>	<b>59</b>	<b>10</b>	<b>50</b>	<b>135</b>
0901. Eggs	19	0	6	68	33	59	10	50	135
<b>10. Fats and oils</b>	<b>28</b>	<b>5</b>	<b>25</b>	<b>61</b>	<b>96</b>	<b>30</b>	<b>6</b>	<b>27</b>	<b>63</b>
1000. Unclassified and combined fat	2	0	0	10	20	10	1	8	27
1001. Vegetable oils	4	0	2	14	36	10	2	8	27
1002. Butter	3	0	0	16	19	16	3	12	39
1003. Margarines and cooking fats	20	0	17	52	83	24	3	19	58
1004. Other animal fats (including fish oils)	0	0	0	0	1	11	2	7	34
<b>11. Sugar and confectionery</b>	<b>32</b>	<b>0</b>	<b>23</b>	<b>97</b>	<b>73</b>	<b>43</b>	<b>5</b>	<b>31</b>	<b>110</b>
1100. Unclassified or combined confectionery	1	0	0	0	1	85	10	12	500

Food groups based on GloboDiet classification	mean g/day	P5 g/day	median g/day	P95 g/day	% Con- sumption days	On consumption days			
						mean g/day	P5 g/day	median g/day	P95 g/day
1101. Sugar, honey, jam, syrup, sweet sauce	20	0	11	76	58	34	4	25	98
110100. Unclassified and other sugar, honey, jam, syrup, sweet sauce	0	0	0	0	0	120	120	120	120
110101. Sugar	7	0	0	36	36	18	4	12	50
110102. Jam, jelly, marmelade	8	0	0	39	22	35	5	30	81
110103. Honey	1	0	0	6	5	22	3	20	44
110104. Other sweet spreads	3	0	0	21	6	44	8	31	88
110105. Sweet sauce, sweet toppings for desserts	0	0	0	0	1	22	8	30	30
110106. Syrups (incl. from can and for beverages)	1	0	0	9	6	20	4	15	50
1102. Chocolate, candy bars, paste, confetti/flakes	8	0	0	35	31	27	5	19	63
110200. Unclassified and other chocolate confectionary (incl. sauce)	2	0	0	10	13	15	4	12	50
110201. Chocolate tablet	3	0	0	17	10	28	7	20	68
110202. Chocolate candybars	1	0	0	9	3	40	18	34	58
110203. Chocolate spread and chocolate powder	1	0	0	7	5	29	6	23	69
110204. Chocolate confectionary	1	0	0	8	4	26	10	15	65
1103. Confectionary non- chocolate	3	0	0	14	14	19	2	11	55
<b>12. Cakes and sweet biscuits</b>	<b>47</b>	<b>0</b>	<b>35</b>	<b>141</b>	<b>69</b>	<b>68</b>	<b>10</b>	<b>49</b>	<b>205</b>
1201. Cakes, pies, pastries, puddings (non-milk based)	29	0	15	120	38	77	25	51	200
1202. Dry cakes, sweet biscuits	18	0	10	72	49	37	8	30	90
<b>13. Non-alcoholic beverages</b>	<b>1,662</b>	<b>728</b>	<b>1,572</b>	<b>3,178</b>	<b>100</b>	<b>1,663</b>	<b>637</b>	<b>1,555</b>	<b>3,153</b>
1300. Unclassified and combined non-alcoholic drinks	4	0	0	0	1	385	13	330	660
1301. Fruit and vegetable juices	82	0	0	464	26	312	2	202	987
1302. Carbonated/soft/isotonic drinks, diluted syrups	188	0	75	778	40	459	150	367	1,146
1303. Coffee, tea and herbal teas	957	267	896	1,933	97	979	280	867	1,925
130301. Coffee	673	0	637	1,435	93	733	202	640	1,540
130302. Tea	233	0	104	1,012	44	507	165	406	1,375
130303. Herbal tea	50	0	0	365	11	437	173	360	833

Food groups based on GloboDiet classification	mean g/day	P5 g/day	median g/day	P95 g/day	% Con- sumption days	On consumption days			
						mean g/day	P5 g/day	median g/day	P95 g/day
130304. Chicory, substitutes	0	0	0	0	0	0	0	0	0
1304. Waters	431	0	241	1,432	76	576	33	375	1,750
<b>14. Alcoholic beverages</b>	<b>267</b>	<b>0</b>	<b>165</b>	<b>865</b>	<b>56</b>	<b>480</b>	<b>48</b>	<b>363</b>	<b>1,070</b>
1400. Unclassified, cocktails, punches	0	0	0	0	0	36	36	36	36
1401. Wine, cider, fruit wines	66	0	0	333	26	258	67	208	500
1402. Fortified wines (sherry, porto, vermouth)	4	0	0	0	3	123	0	86	426
1403. Beer	187	0	0	850	28	664	250	600	1,830
1404. Spirits, brandy	9	0	0	65	13	72	14	57	165
1405. Aniseed drinks	0	0	0	0	0	66	66	66	66
1406. Liqueurs	1	0	0	0	1	52	22	44	88
<b>15. Condiments, spices, sauces and yeast</b>	<b>39</b>	<b>0</b>	<b>33</b>	<b>106</b>	<b>77</b>	<b>50</b>	<b>4</b>	<b>36</b>	<b>147</b>
1500. Unclassified or combined condiments and sauces	0	0	0	0	1	26	12	26	35
1501. Savory sauces	34	0	26	104	64	55	9	43	151
150100. Other and mixed sauces	20	0	12	61	40	50	12	43	114
150101. Tomato sauces	5	0	0	33	10	49	11	33	159
150102. Dressings, mayonnaises and similar	6	0	0	27	21	27	4	23	82
150103. Mayonnaise based spreads	4	0	0	30	8	48	10	50	100
1503. Spices, herbs and flavourings	0	0	0	0	0	6	1	8	8
1504. Condiments	4	0	0	21	32	11	1	9	33
<b>16. Soups and stocks</b>	<b>37</b>	<b>0</b>	<b>0</b>	<b>176</b>	<b>18</b>	<b>196</b>	<b>28</b>	<b>190</b>	<b>351</b>
1602. Stocks	37	0	0	176	18	196	28	190	351
<b>17. Miscellaneous</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>288</b>	<b>4</b>	<b>292</b>	<b>515</b>
1701. Vegetarian products/dishes	0	0	0	0	0	0	0	0	0
1702. Dietetic products	3	0	0	0	1	288	4	292	515
170201. Artificial sweeteners	0	0	0	0	0	4	4	4	4
170202. Meal substitutes	3	0	0	0	1	317	125	292	515
<b>18. Savoury snacks</b>	<b>15</b>	<b>0</b>	<b>0</b>	<b>72</b>	<b>24</b>	<b>65</b>	<b>10</b>	<b>59</b>	<b>150</b>
1800. Unclassified or combined snacks	0	0	0	0	0	0	0	0	0
1801. Savoury snacks, biscuits and crisps	6	0	0	39	15	39	8	29	97
1802. Savoury filled buns, croissants	9	0	0	63	11	88	34	70	162
<b>19. Ready meals</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
1901. Jarred meals for children	0	0	0	0	0	0	0	0	0

Appendix B Table 5.1.h Food consumption (food groups and food subgroups) of Dutch women aged 51-79 years (DNFCS 2012-2014), weighted for socio-demographic characteristics, season and day of the week (n=234).

Food groups based on GloboDiet classification	mean g/day	P5 g/day	median g/day	P95 g/day	% Con- sumption days	On consumption days			
						mean g/day	P5 g/day	median g/day	P95 g/day
<b>01. Potatoes and other tubers</b>	<b>63</b>	<b>0</b>	<b>60</b>	<b>167</b>	<b>48</b>	<b>131</b>	<b>41</b>	<b>138</b>	<b>245</b>
0100. Unclassified and other tubers	0	0	0	0	0	0	0	0	0
0101. Potatoes	63	0	60	167	48	131	41	138	245
<b>02. Vegetables</b>	<b>159</b>	<b>31</b>	<b>139</b>	<b>366</b>	<b>89</b>	<b>178</b>	<b>33</b>	<b>158</b>	<b>413</b>
0200. Unclassified, mixed salads/vegetables	10	0	0	50	15	69	11	50	190
0201. Leafy vegetables (except cabbages)	27	0	8	117	34	80	10	60	225
0202. Fruiting vegetables	61	0	40	188	54	110	8	81	308
0203. Root vegetables	14	0	0	81	22	64	5	38	180
0204. Cabbages	21	0	0	120	17	123	4	136	262
0205. Mushrooms	3	0	0	27	8	41	5	35	94
0206. Grain and pod vegetables	3	0	0	19	5	62	3	38	200
0207. Leek, onion, garlic	16	0	8	54	44	36	4	25	107
0208. Stalk vegetables, sprouts	5	0	0	17	7	67	1	12	306
<b>03. Legumes</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>76</b>	<b>7</b>	<b>117</b>	<b>22</b>	<b>101</b>	<b>225</b>
0301. Legumes	8	0	0	76	7	117	22	101	225
<b>04. Fruits, nuts and seeds, olives</b>	<b>156</b>	<b>0</b>	<b>118</b>	<b>435</b>	<b>76</b>	<b>205</b>	<b>20</b>	<b>154</b>	<b>497</b>
0400. Unclassified, mixed fruits, nuts and seeds	1	0	0	0	1	41	25	25	150
0401. Fruits, fruit compote	148	0	115	430	69	213	35	155	507
040101. Fruits	142	0	107	404	68	209	35	153	497
040102. Fruit compote	5	0	0	50	5	107	26	100	250
0402. Nuts and seeds (+ nut spread)	7	0	0	40	20	35	5	30	100
040201. Nuts, peanuts, seeds	5	0	0	35	16	33	5	30	100
040202. Peanut butter, nut/seeds spread	2	0	0	18	6	30	7	24	93
0403. Olives	1	0	0	6	5	17	1	12	48
<b>05. Dairy products and substitutes</b>	<b>333</b>	<b>51</b>	<b>313</b>	<b>748</b>	<b>97</b>	<b>349</b>	<b>42</b>	<b>307</b>	<b>738</b>
0500. Unclassified and mixed dairy products	2	0	0	0	2	160	108	148	225
0501. Milk, milk beverages and fermented milk beverages	162	0	106	469	58	287	25	245	720
050100. Unclassified or combined milk and milk beverages	4	0	0	0	2	314	238	297	412

Food groups based on GloboDiet classification	mean g/day	P5 g/day	median g/day	P95 g/day	% Con- sumption days	On consumption days			
						mean g/day	P5 g/day	median g/day	P95 g/day
050101. Non-fermented milk and milk beverages	89	0	3	405	38	235	16	215	618
050102. Fermented milk, milk beverages and yoghurt drinks	69	0	0	326	25	282	126	225	612
0502. Milk substitutes and milk substitute products	7	0	0	0	3	244	147	221	376
0503. Yoghurt	78	0	54	263	39	200	81	202	432
0504. Fromage blanc, petits suisses	8	0	0	75	6	131	27	137	206
0505. Cheeses (including spread cheeses)	35	0	31	88	73	48	12	36	116
0506. Cream desserts, puddings (milk based)	24	0	0	155	16	154	16	155	300
0507. Dairy and non-dairy creams, creamers	10	0	0	40	36	27	5	24	56
050700. Unclassified creams	7	0	0	34	28	27	5	24	56
050701. Dairy creams and creamers	2	0	0	14	9	20	3	20	40
050702. Non-dairy creams and creamers	1	0	0	0	1	40	12	27	64
0508. Ice cream and substitutes, sorbet and water ice	6	0	0	50	8	81	32	75	125
050800. Unclassified, combined ice creams/sorbets	0	0	0	0	1	52	40	47	65
050801. Ice cream (milk based)	5	0	0	50	7	82	32	75	125
050803. Sorbet/water ice	1	0	0	0	0	97	50	110	110
<b>06. Cereals and cereal products</b>	<b>140</b>	<b>35</b>	<b>130</b>	<b>266</b>	<b>97</b>	<b>144</b>	<b>35</b>	<b>130</b>	<b>305</b>
0601. Flour, starches, flakes, semolina used as flour	2	0	0	13	11	14	2	8	51
0602. Pasta, rice, other grain	27	0	0	110	27	100	15	96	229
0603. Bread, crisp bread, rusks	101	10	97	204	92	110	30	103	234
060301. Bread	95	0	88	198	87	110	35	105	230
060302. Crispbread, rusks	6	0	0	26	31	19	7	20	40
0604. Breakfast cereals	5	0	0	30	20	28	10	26	60
0605. Dough and pastry (plain puff, short-crust, pizza)	5	0	0	43	5	108	19	88	207
<b>07. Meat, meat products and substitutes</b>	<b>84</b>	<b>0</b>	<b>82</b>	<b>185</b>	<b>85</b>	<b>100</b>	<b>19</b>	<b>86</b>	<b>230</b>
0700. Unclassified and combined meat meat products	2	0	0	0	2	134	21	150	240
0701. Domestic mammals	12	0	0	86	15	87	10	80	172



Food groups based on GloboDiet classification	mean g/day	P5 g/day	median g/day	P95 g/day	% Con- sumption days	On consumption days			
						mean g/day	P5 g/day	median g/day	P95 g/day
070100. Unclassified, mixed and other mammals	0	0	0	0	2	33	23	32	77
070101. Beef	17	0	0	94	19	86	9	72	225
070102. Veal	0	0	0	0	0	0	0	0	0
070103. Pork	12	0	0	86	14	89	10	88	172
070104. Mutton/Lamb	0	0	0	0	0	0	0	0	0
070105. Horse	0	0	0	0	0	0	0	0	0
070107. Rabbit	0	0	0	0	0	0	0	0	0
0702. Poultry	13	0	0	60	18	78	20	56	172
070200. Unclassified and other poultry	0	0	0	0	0	0	0	0	0
070201. Chicken, hen	13	0	0	60	18	78	20	56	172
070202. Turkey, young turkey	0	0	0	0	0	125	125	125	125
070203. Duck	0	0	0	0	0	20	20	20	20
0703. Game	0	0	0	0	0	0	0	0	0
0704. Processed meat	37	0	30	106	60	61	8	44	162
070401. Hot processed meat	22	0	0	92	28	79	6	77	188
070402. Cold processed meat	15	0	8	55	44	35	8	25	92
0705. Offals	2	0	0	0	2	90	16	38	277
0706. Meat substitutes	1	0	0	0	2	47	6	70	78
070601. Hot meal substitutes	1	0	0	0	2	52	6	70	78
070602. Cold meal substitutes	0	0	0	0	0	19	19	19	19
<b>08. Fish, shellfish and amphibians</b>	<b>24</b>	<b>0</b>	<b>0</b>	<b>131</b>	<b>19</b>	<b>125</b>	<b>11</b>	<b>100</b>	<b>312</b>
0800. Unclassified and combined fish products	0	0	0	0	0	0	0	0	0
0801. Fish	18	0	0	101	16	112	11	92	280
0802. Crustaceans, molluscs	2	0	0	0	2	79	9	60	290
0803. Fish products, fish in crumbs	4	0	0	20	3	170	39	145	350
<b>09. Eggs and egg products</b>	<b>12</b>	<b>0</b>	<b>0</b>	<b>45</b>	<b>23</b>	<b>53</b>	<b>10</b>	<b>50</b>	<b>100</b>
0901. Eggs	12	0	0	45	23	53	10	50	100
<b>10. Fats and oils</b>	<b>20</b>	<b>4</b>	<b>18</b>	<b>41</b>	<b>94</b>	<b>22</b>	<b>3</b>	<b>18</b>	<b>52</b>
1000. Unclassified and combined fat	1	0	0	6	12	8	1	5	26
1001. Vegetable oils	3	0	1	12	34	9	1	7	27
1002. Butter	2	0	0	13	17	12	2	9	31
1003. Margarines and cooking fats	14	0	11	36	77	18	1	15	41
1004. Other animal fats (including fish oils)	0	0	0	0	1	17	2	16	28
<b>11. Sugar and confectionery</b>	<b>28</b>	<b>0</b>	<b>17</b>	<b>88</b>	<b>65</b>	<b>41</b>	<b>4</b>	<b>25</b>	<b>115</b>
1100. Unclassified or combined confectionery	0	0	0	0	1	10	10	10	10

Food groups based on GloboDiet classification	mean g/day	P5 g/day	median g/day	P95 g/day	% Con- sumption days	On consumption days			
						mean g/day	P5 g/day	median g/day	P95 g/day
1101. Sugar, honey, jam, syrup, sweet sauce	15	0	3	58	43	33	5	21	99
110100. Unclassified and other sugar, honey, jam, syrup, sweet sauce	0	0	0	0	0	0	0	0	0
110101. Sugar	3	0	0	19	17	18	2	10	64
110102. Jam, jelly, marmelade	5	0	0	25	17	26	3	19	60
110103. Honey	3	0	0	14	9	29	1	17	170
110104. Other sweet spreads	3	0	0	21	9	32	3	24	97
110105. Sweet sauce, sweet toppings for desserts	0	0	0	0	0	19	11	15	30
110106. Syrups (incl. from can and for beverages)	1	0	0	8	4	26	2	15	68
1102. Chocolate, candy bars, paste, confetti/flakes	7	0	0	39	29	25	5	19	78
110200. Unclassified and other chocolate confectionary (incl. sauce)	1	0	0	9	10	12	2	10	30
110201. Chocolate tablet	3	0	0	17	12	26	7	20	90
110202. Chocolate candybars	1	0	0	8	3	39	8	29	100
110203. Chocolate spread and chocolate powder	1	0	0	12	5	22	9	18	54
110204. Chocolate confectionary	1	0	0	7	3	25	14	16	54
1103. Confectionary non- chocolate	6	0	0	19	25	22	1	8	120
<b>12. Cakes and sweet biscuits</b>	<b>40</b>	<b>0</b>	<b>32</b>	<b>101</b>	<b>70</b>	<b>59</b>	<b>12</b>	<b>45</b>	<b>150</b>
1201. Cakes, pies, pastries, puddings (non-milk based)	25	0	15	80	37	66	19	55	145
1202. Dry cakes, sweet biscuits	16	0	10	51	47	34	7	26	80
<b>13. Non-alcoholic beverages</b>	<b>2,010</b>	<b>853</b>	<b>1,884</b>	<b>3,078</b>	<b>100</b>	<b>2,018</b>	<b>793</b>	<b>1,911</b>	<b>3,439</b>
1300. Unclassified and combined non-alcoholic drinks	1	0	0	0	1	108	6	100	258
1301. Fruit and vegetable juices	59	0	0	258	28	218	31	197	515
1302. Carbonated/soft/isotonic drinks, diluted syrups	99	0	0	520	28	361	100	258	837
1303. Coffee, tea and herbal teas	1,090	413	998	1,800	99	1,097	369	987	2,113
130301. Coffee	610	0	575	1,339	92	672	175	633	1,387
130302. Tea	359	0	225	1,077	56	637	158	475	1,667
130303. Herbal tea	121	0	0	729	22	544	145	314	1,600

Food groups based on GloboDiet classification	mean g/day	P5 g/day	median g/day	P95 g/day	% Con- sumption days	On consumption days			
						mean g/day	P5 g/day	median g/day	P95 g/day
130304. Chicory, substitutes	0	0	0	0	0	0	0	0	0
1304. Waters	761	25	596	1,811	92	831	100	650	2,067
<b>14. Alcoholic beverages</b>	<b>98</b>	<b>0</b>	<b>0</b>	<b>450</b>	<b>38</b>	<b>250</b>	<b>50</b>	<b>200</b>	<b>600</b>
1400. Unclassified, cocktails, punches	0	0	0	0	0	31	31	31	31
1401. Wine, cider, fruit wines	70	0	0	315	30	231	83	207	500
1402. Fortified wines (sherry, porto, vermouth)	3	0	0	20	3	90	50	80	150
1403. Beer	23	0	0	150	4	504	157	340	1,000
1404. Spirits, brandy	1	0	0	0	2	60	29	66	133
1405. Aniseed drinks	0	0	0	0	0	0	0	0	0
1406. Liqueurs	1	0	0	0	2	64	22	42	122
<b>15. Condiments, spices, sauces and yeast</b>	<b>30</b>	<b>0</b>	<b>22</b>	<b>78</b>	<b>74</b>	<b>41</b>	<b>2</b>	<b>26</b>	<b>122</b>
1500. Unclassified or combined condiments and sauces	0	0	0	0	1	28	5	18	58
1501. Savory sauces	26	0	17	75	59	46	7	31	124
150100. Other and mixed sauces	13	0	0	53	30	44	12	29	106
150101. Tomato sauces	3	0	0	21	9	34	1	21	98
150102. Dressings, mayonnaises and similar	7	0	0	37	28	25	3	20	80
150103. Mayonnaise based spreads	4	0	0	30	9	42	10	40	112
1503. Spices, herbs and flavourings	0	0	0	0	0	0	0	0	0
1504. Condiments	3	0	0	15	32	10	1	6	31
<b>16. Soups and stocks</b>	<b>37</b>	<b>0</b>	<b>0</b>	<b>247</b>	<b>16</b>	<b>224</b>	<b>73</b>	<b>180</b>	<b>524</b>
1602. Stocks	37	0	0	247	16	224	73	180	524
<b>17. Miscellaneous</b>	<b>10</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>267</b>	<b>19</b>	<b>258</b>	<b>515</b>
1701. Vegetarian products/dishes	0	0	0	0	0	0	0	0	0
1702. Dietetic products	10	0	0	0	3	267	19	258	515
170201. Artificial sweeteners	0	0	0	0	0	7	7	7	7
170202. Meal substitutes	10	0	0	0	3	275	19	258	515
<b>18. Savoury snacks</b>	<b>12</b>	<b>0</b>	<b>0</b>	<b>63</b>	<b>20</b>	<b>58</b>	<b>6</b>	<b>40</b>	<b>154</b>
1800. Unclassified or combined snacks	0	0	0	0	0	20	20	20	20
1801. Savoury snacks, biscuits and crisps	5	0	0	32	13	35	4	25	100
1802. Savoury filled buns, croissants	7	0	0	41	8	94	17	72	250
<b>19. Ready meals</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
1901. Jarred meals for children	0	0	0	0	0	0	0	0	0

*Appendix B Table 5.2 Average contribution of consumption moments to total food group consumption of Dutch children and adults, (DNFCS 2012-2014), weighted for socio-demographic factors, season and day of the week (n=2,337).*

<b>Food groups based on GloboDiet Classification</b>	<b>Breakfast mean %</b>	<b>Lunch mean %</b>	<b>Dinner mean %</b>	<b>Inbetween mean %</b>
01 Potatoes and other tubers	0	5	92	3
02 Vegetables	1	9	85	6
03 Legumes	0	14	81	5
04 Fruits, nuts and seeds, olives	11	13	16	60
05 Dairy products and substitutes	27	25	27	21
06 Cereals and cereal products	25	38	28	8
07 Meat, meat products and substitutes	5	17	72	6
08 Fish, shellfish and amphibians	3	22	66	9
09 Eggs and egg products	20	26	49	5
10 Fats and oils	19	29	46	7
11 Sugar and confectionery	28	14	8	49
12 Cakes and sweet biscuits	6	5	2	87
13 Non-alcoholic beverages	12	9	10	70
14 Alcoholic beverages	0	1	19	81
15 Condiments, spices, sauces and yeast	2	16	75	6
16 Soups and stocks	0	35	50	15
17 Miscellaneous	44	15	13	28
18 Savoury snacks	1	12	21	65
19 Ready meals	0	0	100	0

*Appendix B Table 5.2.a Average contribution of consumption moments of consumption to total food group consumption of Dutch children aged 1-8 years, (DNFCS 2012-2014), weighted for socio-demographic factors, season and day of the week (n=658).*

<b>Food groups based on GloboDiet Classification</b>	<b>Breakfast mean %</b>	<b>Lunch mean %</b>	<b>Dinner mean %</b>	<b>Inbetween mean %</b>
01 Potatoes and other tubers	0	5	94	2
02 Vegetables	0	5	87	7
03 Legumes	0	6	94	0
04 Fruits, nuts and seeds, olives	5	9	12	74
05 Dairy products and substitutes	31	25	24	20
06 Cereals and cereal products	31	41	23	6
07 Meat, meat products and substitutes	6	20	69	5
08 Fish, shellfish and amphibians	0	17	75	8
09 Eggs and egg products	16	29	49	6
10 Fats and oils	25	36	35	4
11 Sugar and confectionery	20	20	9	51
12 Cakes and sweet biscuits	6	7	3	84
13 Non-alcoholic beverages	8	10	15	66
14 Alcoholic beverages	0	0	100	0
15 Condiments, spices, sauces and yeast	1	11	86	2
16 Soups and stocks	0	16	76	8
17 Miscellaneous	0	23	0	77
18 Savoury snacks	2	10	12	77
19 Ready meals	0	0	100	0

*Appendix B Table 5.2.b Average contribution of consumption moments to total food group consumption of Dutch children aged 9-18 years, (DNFCS 2012-2014), weighted for socio-demographic factors, season and day of the week (n=532).*

<b>Food groups based on EPIC-Soft Classification</b>	<b>Breakfast mean %</b>	<b>Lunch mean %</b>	<b>Dinner mean %</b>	<b>Inbetween mean %</b>
01 Potatoes and other tubers	0	4	91	6
02 Vegetables	1	6	87	6
03 Legumes	0	2	96	2
04 Fruits, nuts and seeds, olives	9	12	23	56
05 Dairy products and substitutes	32	16	33	19
06 Cereals and cereal products	27	35	28	10
07 Meat, meat products and substitutes	5	16	72	7
08 Fish, shellfish and amphibians	1	9	74	15
09 Eggs and egg products	18	23	51	8
10 Fats and oils	17	26	48	9
11 Sugar and confectionery	22	16	8	54
12 Cakes and sweet biscuits	5	7	2	86
13 Non-alcoholic beverages	9	12	14	65
14 Alcoholic beverages	0	1	16	84
15 Condiments, spices, sauces and yeast	3	10	78	9
16 Soups and stocks	2	26	55	17
17 Miscellaneous	47	11	3	39
18 Savoury snacks	0	11	15	74
19 Ready meals	.	.	.	.

*Appendix B Table 5.2.c Average contribution of consumption moments to total food group consumption of Dutch adults aged 19-50 years, (DNFCS 2012-2014), weighted for socio-demographic factors, season and day of the week (n=532).*

<b>Food groups based on EPIC-Soft Classification</b>	<b>Breakfast mean %</b>	<b>Lunch mean %</b>	<b>Dinner mean %</b>	<b>Inbetween mean %</b>
01 Potatoes and other tubers	0	3	93	4
02 Vegetables	1	9	85	5
03 Legumes	0	16	81	3
04 Fruits, nuts and seeds, olives	14	14	15	57
05 Dairy products and substitutes	28	25	25	21
06 Cereals and cereal products	24	37	30	9
07 Meat, meat products and substitutes	5	16	73	6
08 Fish, shellfish and amphibians	3	22	68	8
09 Eggs and egg products	18	29	49	4
10 Fats and oils	17	28	48	7
11 Sugar and confectionery	27	15	8	50
12 Cakes and sweet biscuits	6	6	2	86
13 Non-alcoholic beverages	10	9	11	71
14 Alcoholic beverages	0	1	21	78
15 Condiments, spices, sauces and yeast	3	19	73	6
16 Soups and stocks	0	29	56	15
17 Miscellaneous	53	11	15	20
18 Savoury snacks	1	14	23	61
19 Ready meals	.	.	.	.

*Appendix B Table 5.2.d Average contribution of consumption moments to total food group consumption of Dutch adults aged 51-79 years, (DNFCS 2012-2014), weighted for socio-demographic factors, season and day of the week (n=515).*

<b>Food groups based on GloboDiet Classification</b>	<b>Breakfast mean %</b>	<b>Lunch mean %</b>	<b>Dinner mean %</b>	<b>Inbetween mean %</b>
01 Potatoes and other tubers	0	7	91	2
02 Vegetables	1	12	82	5
03 Legumes	0	16	77	7
04 Fruits, nuts and seeds, olives	10	14	16	60
05 Dairy products and substitutes	23	28	28	21
06 Cereals and cereal products	25	41	28	7
07 Meat, meat products and substitutes	4	19	70	7
08 Fish, shellfish and amphibians	4	25	62	9
09 Eggs and egg products	25	23	47	4
10 Fats and oils	20	30	45	5
11 Sugar and confectionery	34	11	9	46
12 Cakes and sweet biscuits	6	3	2	89
13 Non-alcoholic beverages	15	7	6	71
14 Alcoholic beverages	0	1	16	83
15 Condiments, spices, sauces and yeast	1	17	75	7
16 Soups and stocks	0	43	42	15
17 Miscellaneous	35	19	11	36
18 Savoury snacks	1	9	25	64
19 Ready meals	.	.	.	.



*Appendix B Table 5.3 Average contribution of places of consumption to total food group consumption of Dutch children and adults (DNFCS 2012-2014), weighted for socio-demographic factors, season and day of the week (n=2,237).*

<b>Food groups based on GloboDiet Classification</b>	<b>Home mean %</b>	<b>School/ work mean %</b>	<b>Restaurant mean %</b>	<b>Outside and travelling mean %</b>	<b>Other mean %</b>
01 Potatoes and other tubers	89	3	7	1	0
02 Vegetables	89	5	5	0	0
03 Legumes	90	8	2	0	0
04 Fruits, nuts and seeds, olives	72	21	3	3	1
05 Dairy products and substitutes	85	10	4	1	1
06 Cereals and cereal products	78	15	4	2	1
07 Meat, meat products and substitutes	85	8	6	1	1
08 Fish, shellfish and amphibians	75	4	17	4	1
09 Eggs and egg products	86	6	7	1	0
10 Fats and oils	81	11	6	1	1
11 Sugar and confectionery	78	13	2	4	2
12 Cakes and sweet biscuits	71	17	5	4	3
13 Non-alcoholic beverages	75	17	3	2	3
14 Alcoholic beverages	79	2	15	1	3
15 Condiments, spices, sauces and yeast	85	7	7	1	1
16 Soups and stocks	74	16	8	0	1
17 Miscellaneous	78	9	6	5	3
18 Savoury snacks	79	8	6	4	3
19 Ready meals	100	0	0	0	0

*Appendix B Table 5.3.a Average contribution of places of consumption to total food group consumption of Dutch children aged 1-8 years (DNFCS 2012-2014), weighted for socio-demographic factors, season and day of the week (n=658).*

<b>Food groups based on GloboDiet Classification</b>	<b>Home mean %</b>	<b>School/ work mean %</b>	<b>Restaurant mean %</b>	<b>Outside and travelling mean %</b>	<b>Other mean %</b>
01 Potatoes and other tubers	93	1	6	0	0
02 Vegetables	97	2	0	0	0
03 Legumes	96	1	2	0	0
04 Fruits, nuts and seeds, olives	68	28	1	2	1
05 Dairy products and substitutes	89	7	2	1	1
06 Cereals and cereal products	87	10	1	1	1
07 Meat, meat products and substitutes	91	5	2	1	1
08 Fish, shellfish and amphibians	92	0	4	4	0
09 Eggs and egg products	94	2	3	1	0
10 Fats and oils	86	9	3	1	1
11 Sugar and confectionery	83	11	1	3	2
12 Cakes and sweet biscuits	70	17	3	6	4
13 Non-alcoholic beverages	78	15	1	3	3
14 Alcoholic beverages	100	0	0	0	0
15 Condiments, spices, sauces and yeast	93	2	4	0	0
16 Soups and stocks	97	1	2	0	0
17 Miscellaneous	77	0	0	23	0
18 Savoury snacks	82	6	2	7	4
19 Ready meals	100	0	0	0	0

*Appendix B Table 5.3.b Average contribution of places of consumption to total food group consumption of Dutch children aged 9-18 years (DNFCS 2012-2014), weighted for socio-demographic factors, season and day of the week (n=532).*

<b>Food groups based on GloboDiet Classification</b>	<b>Home mean %</b>	<b>School/work mean %</b>	<b>Restaurant mean %</b>	<b>Outside and travelling mean %</b>	<b>Other mean %</b>
01 Potatoes and other tubers	90	1	7	1	1
02 Vegetables	93	2	4	0	0
03 Legumes	99	0	0	0	1
04 Fruits, nuts and seeds, olives	71	22	2	2	2
05 Dairy products and substitutes	89	7	3	1	1
06 Cereals and cereal products	76	19	3	1	1
07 Meat, meat products and substitutes	85	8	5	1	1
08 Fish, shellfish and amphibians	90	3	7	0	0
09 Eggs and egg products	91	3	5	0	0
10 Fats and oils	79	13	6	1	1
11 Sugar and confectionery	77	15	1	4	3
12 Cakes and sweet biscuits	63	28	2	4	3
13 Non-alcoholic beverages	70	19	3	3	5
14 Alcoholic beverages	76	0	19	3	2
15 Condiments, spices, sauces and yeast	88	3	6	1	1
16 Soups and stocks	92	5	2	0	0
17 Miscellaneous	94	3	0	3	0
18 Savoury snacks	79	8	3	6	3
19 Ready meals	.	.	.	.	.

*Appendix B Table 5.3.c Average contribution of places of consumption to total food group consumption of Dutch adults aged 19-50 years (DNFCS 2012-2014), weighted for socio-demographic factors, season and day of the week (n=532).*

<b>Food groups based on GloboDiet Classification</b>	<b>Home mean %</b>	<b>School/work mean %</b>	<b>Restaurant mean %</b>	<b>Outside and travelling mean %</b>	<b>Other mean %</b>
01 Potatoes and other tubers	86	5	8	1	0
02 Vegetables	85	8	6	0	1
03 Legumes	83	17	0	0	0
04 Fruits, nuts and seeds, olives	64	28	4	3	1
05 Dairy products and substitutes	80	14	4	1	1
06 Cereals and cereal products	72	20	4	2	1
07 Meat, meat products and substitutes	81	10	7	1	1
08 Fish, shellfish and amphibians	68	7	19	6	1
09 Eggs and egg products	81	10	7	2	0
10 Fats and oils	76	15	7	1	1
11 Sugar and confectionery	72	18	3	5	2
12 Cakes and sweet biscuits	65	23	4	5	2
13 Non-alcoholic beverages	69	22	3	3	3
14 Alcoholic beverages	75	3	18	2	3
15 Condiments, spices, sauces and yeast	78	12	8	1	1
16 Soups and stocks	73	21	6	0	0
17 Miscellaneous	74	10	12	4	0
18 Savoury snacks	80	9	5	3	3
19 Ready meals	.	.	.	.	.

*Appendix B Table 5.3.d Average contribution of places of consumption to total food group consumption of Dutch adults aged 51-79 years (DNFCS 2012-2014), weighted for socio-demographic factors, season and day of the week (n=515).*

<b>Food groups based on GloboDiet Classification</b>	<b>Home mean %</b>	<b>School/ work mean %</b>	<b>Restaurant mean %</b>	<b>Outside and travelling mean %</b>	<b>Other mean %</b>
01 Potatoes and other tubers	92	2	6	0	0
02 Vegetables	92	2	6	0	0
03 Legumes	94	3	4	0	0
04 Fruits, nuts and seeds, olives	83	10	3	3	1
05 Dairy products and substitutes	88	6	4	0	1
06 Cereals and cereal products	85	9	4	2	1
07 Meat, meat products and substitutes	88	5	6	1	1
08 Fish, shellfish and amphibians	76	2	18	2	1
09 Eggs and egg products	87	4	8	0	0
10 Fats and oils	87	6	6	1	1
11 Sugar and confectionery	86	5	3	4	2
12 Cakes and sweet biscuits	81	7	7	1	4
13 Non-alcoholic beverages	84	9	3	1	2
14 Alcoholic beverages	82	2	12	1	3
15 Condiments, spices, sauces and yeast	90	2	7	0	0
16 Soups and stocks	71	15	11	1	2
17 Miscellaneous	81	9	0	4	6
18 Savoury snacks	78	5	13	2	3
19 Ready meals	.	.	.	.	.

*Appendix B Table 5.4 Mean consumption (main food groups) of the Dutch population aged 9-69 years in DNFCS 2007-2010 (column 2010) and DNFCS 2012-2014 (column 2014), weighted for socio-demographic factors, season and day of the week.*

<b>Food groups based on GloboDiet classification</b>	<b>2010 mean g/day</b>	<b>2014 mean g/day</b>
01. Potatoes and other tubers	92	75
02. Vegetables	131	130
03. Legumes	4	4
04. Fruits, nuts and seeds, olives	114	116
05. Dairy products and substitutes	394	351
06. Cereals and cereal products	200	201
07. Meat, meat products and substitutes	113	106
08. Fish, shellfish and amphibians	16	16
09. Eggs and egg products	12	12
10. Fats and oils	27	23
11. Sugar and confectionery	38	37
12. Cakes and sweet biscuits	43	40
13. Non-alcoholic beverages	1,705	1,848
14. Alcoholic beverages	189	167
15. Condiments, spices, sauces and yeast	33	40
16. Soups and stocks	28	25
17. Miscellaneous	3	5
18. Savoury snacks	21	22



