The 2015 Dutch food-based dietary guidelines:

supplementary information

Appendix 1: explanation of how the Health Council of the Netherlands has handled interests of the committee.

Appendix 2: 17 supplementary tables describing the main quantitative conclusions supporting the guidelines on fruit, vegetables, meat, dairy products, legumes, nuts, cereal products, fat-rich products, fish, beverages, alcohol, salt, supplements, and dietary patterns.
Appendix 1: Members and advisors to the committee

Members of Health Council committees are appointed in a personal capacity because of their special expertise in the matters to be addressed. Nonetheless, it is precisely because of this expertise that they may also have interests. This in itself does not necessarily present an obstacle for membership of a Health Council committee. Transparency regarding possible conflicts of interest is nonetheless important, both for the chairperson and members of a committee and for the President of the Health Council. On being invited to join a committee, members are asked to submit a form detailing the functions they hold and any other material and immaterial interests which could be relevant for the committee’s work. It is the responsibility of the President of the Health Council to assess whether the interests indicated constitute grounds for nonappointment. An advisorship will then sometimes make it possible to exploit the expertise of the specialist involved. Advisors cannot, however, vote on the formulation of the committee’s conclusions or recommendations and they have no responsibility for the contents of advisory reports. During the inaugural meeting the declarations issued are discussed, so that all members of the committee are aware of each other’s possible interests.

Composition of the Committee Dutch dietary guidelines 2015:

Members: JB, AWH, JAI, DK, HP (until April 2015), JAR, JCS, PV (until June 2015), MV.

Advisors: JMG, JBG, MTEH, RPM, HP (from April 2015 onwards), AMWJS, PV (from June 2015 onwards), MHZ.
Appendix 2: Supplementary tables

Table 1. Main conclusions supporting the guideline on fruit and vegetables

| Exposure       | RCTs | Cohort studies |
|----------------|------|----------------|
|                | Blood pressure | LDL-cholesterol | Coronary heart disease | Stroke |
| Fruit and vegetables | +400 g/d | ►-3 mmHg | | |
| Vegetables     | 200 v. 125 g/d ♦ -10% | Per 200 g/d ♦ -10% | | |
| Fruit          | 250 v. 50 g/d ♦ -10% | Per 200 g/d ♦ -30% | | |
| Pectin         | +1 g/d | ► -0.05 mmol/l | | |

► represents an effect; ♦ represents an association.

Table 2. Main conclusions supporting the guideline on meat

| Exposure               | Cohort studies |
|------------------------|----------------|
|                        | Stroke | Diabetes | Colorectal cancer | Lung cancer |
| Total red meat         | 100-120 g/d ♦ +10% | 100 g/d ♦ +15% | 100 g/d ♦ +10% | 100-120 g/d ♦ +20% |
| Unprocessed read meat  | 100-120 g/d ♦ +10% | 100 g/d ♦ +15% | | |
| Processed meat         | 50 g/d ♦ +10% | 50 g/d ♦ +20% | 50 g/d ♦ +15% |
represents an association.

Table 3  Main conclusions supporting the guideline on dairy products

| Cohort studies | Diabetes | Colorectal cancer |
|----------------|----------|-------------------|
| **Exposure**   |          |                   |
| Total dairy    | 400 g/d ♦ -15% |
| Milk           | Per 200 g/d ♦ -10% |
| Yoghurt        | ≥60 g/d v. <10 g/d ♦ -15% |
| Calcium        | 300 mg/d ♦ -10% |

* ♦ represents an association.

a) The associations observed in cohort studies regarding calcium supplements are reported here because the quantities involved are consistent with normal dairy product consumption. Hence, the findings regarding such supplements are relevant in relation to dairy products. In the Netherlands, 58 per cent of calcium intake derives from dairy products.45
Table 4  Main conclusions supporting the guideline on legumes

| Exposure                  | LDL-cholesterol |
|---------------------------|-----------------|
| Legumes 130 g/d          | ▶ -0.20 mmol/l  |
| Soya protein v. casein 40 g/d | ▶ -0.15 mmol/l |

▶ represents an effect.

Table 5  Main conclusions supporting the guideline on nuts

| Exposure     | LDL-cholesterol | Coronary heart disease |
|--------------|-----------------|------------------------|
| Nuts 35 g/d  | ▶ -0.15 mmol/l  | 15 g/d ♦ -20%          |

▶ represents an effect; ♦ represents an association.

a Nuts or linseed.

Table 6  Main conclusions supporting the guideline on whole-grain products

| Exposure     | Blood pressure | LDL-cholesterol | Coronary heart disease | Stroke |
|--------------|----------------|-----------------|------------------------|--------|
| Whole-grain  |                |                 | 90 g/d ♦ -25%          |        |
| products     |                |                 |                        |        |
| Oat          |                |                 | 30-60 g/d              |        |
| Product          | Effect               | Units            | Change          |
|------------------|----------------------|------------------|-----------------|
| Beta-glucan      | -0.20 mmol/l         |                  |                 |
| Cereal fibre     | +1 g/d               | Per 7 g/d        | -0.05 mmol/l    |
| Total fibre      | +10 g/d              | Per 7 g/d        | -1 to -2 mmHg^a |
|                  |                      | High vs low      | -15%            |

- ▶ represents an effect; ◆ represents an association.

a) Diastolic blood pressure.
Table 7  Main conclusions supporting the guideline on fat-rich products

| Exposure                              | RCTs                        | Cohort studies                  |
|---------------------------------------|-----------------------------|---------------------------------|
|                                       | LDL-cholesterol             | Coronary heart disease          |
|                                       | Coronary heart disease      |                                 |
| Soft margarine v. butter              | 10% of energy\(^a\)         |                                 |
|                                       | ► -0.20 mmol/l              |                                 |
| Cis-monounsaturated fatty acids v.     | 1% of energy                |                                 |
| saturated fatty acids                 | ► -0.041 mmol/l             |                                 |
| Cis-polyunsaturated fatty acids v.     | 1% of energy                | 10% of energy ► -15% 5% of energy♦ -10% |
| saturated fatty acids                 | ► -0.051 mmol/l             |                                 |

► represents an effect; ♦ represents an association.

a) 10% of energy is 10 per cent of total daily energy intake.

Table 8  Main conclusions supporting the guideline on fish

| Exposure                              | RCTs                        | Cohort studies                  |
|---------------------------------------|-----------------------------|---------------------------------|
|                                       | Fatal coronary heart disease| Fatal coronary heart disease    |
|                                       |                             |                                 |
| Fish                                  | ≥ 1/wk v. < 1/mth ♦ -15%\(^a\) |                                 |
| Fatty acids from fish                 | 1 g/d ► -10%\(^b\)          |                                 |

► represents an effect; ♦ represents an association.

a) Eating 1 portion of fish a week is sufficient to obtain the maximum health gain.

b) In cardiac patients and high-risk groups.
Table 9  Main conclusions supporting the guideline on tea

| Exposure  | RCTs          | Cohort studies |
|-----------|---------------|----------------|
|           | Blood pressure| Stroke         |
| Tea\textsuperscript{a} | 3-5 cups/d ▶ -2 mmHg | 3-4 cups/d ♦ -10% |

▶ represents an effect; ♦ represents an association.

a) Black tea and green tea.

Table 10  Main conclusions supporting the guideline on coffee

| Exposure  | RCTs |
|-----------|------|
|           | LDL-cholesterol |
| Unfiltered v. filtered coffee | 5-6 cups/d ▶ +0.30 mmol/l |

▶ represents an effect.
### Table 11  Main conclusions supporting the guideline on sugar-containing beverages

| Exposure                                    | RCTs                      | Cohort studies                  |
|---------------------------------------------|---------------------------|---------------------------------|
| Drinks with added sugar                     | 1 l/d ▶ +1 kg\(^a\)        | Per 330 ml/d ♦ +20%             |
|                                             | 250-500 ml/d ▶ +1 kg\(^b\) |                                 |
| Sugars from sugar-containing beverages      | +17 energy% ▶ +1 kg\(^c\)  |                                 |

▶ represents an effect; ♦ represents an association.

- **a)** In adults, within a month.
- **b)** In children and adolescents; observation concerns an increase in body mass index equating to roughly 1 kilogram of body weight within six to eighteen months.
- **c)** Within 2.5 months.

### Table 12  Main conclusions concerning alcohol consumption of more than 15 grams a day, relative to no alcohol consumption

| Exposure                      | RCTs               | Cohort studies                  |
|-------------------------------|--------------------|---------------------------------|
| Alcohol                       | Per -10% ▶ -1.0 mmHg | ≥30 g/d ♦ +35%\(^a\)           |
| Binge drinking                | ♦ +45%\(^b\)       |                                 |

▶ represents an effect; ♦ represents an association.

- **a)** Relate to the risk relative to people whose alcohol consumption was more than 0, but less than 15 grams a day.
- **b)** Different definitions of binge drinking were used in the cohort studies. The committee considers binge drinking to be 60 grams of alcohol or more per occasion.
Table 13  Main conclusions concerning moderate alcohol consumption (1 to 15 grams a day),
relative to no alcohol consumption

| Exposure | Cardiovascular disease | Diabetes | Breast cancer | Lung cancer | Dementia |
|----------|------------------------|----------|---------------|------------|----------|
| Beer$^a$ | >0 g/d ♦ +15% ♂ | >0 to 5 g/d ♀ and 5 to 15 g/d ♂ | ♦ -20% |
| Wine$^a$ | >0 to 12 g/d | ♦ -25% |
| Spirits$^a$ | >0 to 12 g/d | ♦ +10% ♀ |
| Alcohol | >2 to 15 g/d | >0 to 24 g/d ♀ and >5 to 15 g/d | >0 to 30 g/d |
|          | ♦ -20% | 6 to 48 g/d ♂ ♦ -20% ♦ +5%$^b$ | ♦ -25% |

♦ represents an association.

a) The quantities relate to the amount of alcohol in the drink.

b) Relate to the risk relative to people whose alcohol consumption was more than 0, but less than 5 grams a day.

Table 14 Main conclusions concerning associations with all-cause mortality

| Exposure | Men | Women | Men and women |
|----------|-----|-------|---------------|
| Beer$^a$ | 10-20 g/d ♦ +10%$^b$ | 3-10 g/d ♦ +15%$^b$ | |
|          | >20 g/d ♦ +40%$^b$ | >10 g/d ♦ +50%$^b$ | |
Wine

| Quantity | Effect |
|----------|--------|
| >0 to 10 g/d | -30%<sup>c</sup> |
| >0 to 10 g/d | -20%<sup>c</sup> |
| >40 g/d | +20%<sup>b</sup> |
| >20 g/d | +15%<sup>b</sup> |

Alcohol

| Quantity | Effect |
|----------|--------|
| >40 g/d | +15%<sup>b</sup> |
| >20 g/d | +20%<sup>c</sup> |

*♦* represents an association.

a) The quantities in this table relate to the amount of alcohol in the drink.
b) Relate to the risk relative to people whose alcohol consumption was more than 0, but less than 3 grams a day.
c) Relate to the risk relative to people who did not consume any alcohol.

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**Table 15 Main conclusions supporting the guideline on salt**

| Exposure | Blood pressure |
|----------|----------------|
| Sodium   | -2 g/d ► -2 mmHg<sup>a</sup> and -5 mmHg<sup>b</sup> |

► represents an effect.

a) People with normal blood pressure.
b) People with high blood pressure.
Table 16  Main conclusions supporting the guideline on supplements

| Exposure                        | Lung cancer | Fractures (total) | Hip fractures |
|---------------------------------|-------------|-------------------|--------------|
| Beta-carotene supplement        | 20-30 mg/d<sup>a</sup> |                   | +20%         |
| Vitamin D with calcium supplement | 10-20 µg/d vitamin D and 1 g/d calcium | -10%<sup>b</sup> | -15%<sup>b</sup> |

► represents an effect.

a) In smokers and asbestos workers.

b) Elderly people, particularly post-menopausal women.

Table 17  Main conclusions supporting the guideline on dietary patterns

| Exposure                        | RCTs       | Cohort studies |
|---------------------------------|------------|----------------|
|                                 | Blood pressure | Coronary heart disease | Stroke mortality |
| Recommended dietary patterns    | ► -5 mmHg  | ◆ -20%         | ◆ -20%         | ◆ -20%         |
| Vegetarian dietary patterns     | ► -5 mmHg  | ◆ -25%         |

► represents an effect; ◆ represents an association.