



## WHO Draft Guideline: Total fat intake for adults and children

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Doctors For Nutrition appreciates this opportunity to provide a submission in response to the [WHO Draft Guideline: Total fat intake for adults and children](#). We welcome the report by the WHO Nutrition Guidance Expert Advisory Group (NUGAG) and Subgroup on Diet and Health and commend the high quality of statistical analysis presented within the report.

We are pleased to provide our comments and suggestions on the draft guideline, detailed in our response below. In summary, we would like to see:

1. Recognition that dietary fat intake from whole plant sources is associated with improved health outcomes.
2. Inclusion of planetary health considerations, in particular the urgent imperative for high-income countries to reduce fat intake from animal and processed foods in order to sustain a healthy environment.
3. Reference to the emerging research showing numerous health benefits, including significant weight loss, associated with ad-libitum low fat plant-based diets.

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## COMMENTS

- 1. The guideline should avoid macronutrient 'reductionism', and recognise that the source of dietary fat matters: in particular, explicit recognition should be given to the health benefits associated with plant-based sources of dietary fat.***

Page 3 of the guideline correctly acknowledges that the main sources of fat in the human diet originate from meat, fish and dairy foods. While this guideline has examined fat in the context of the maintenance of a healthy weight, evidence shows fat from plant-based sources is associated with reduced mortality and risk of cardiovascular disease.<sup>1,2</sup> Fats contained within whole plant foods are associated with numerous health benefits as well as being a source of fibre and other bioactive components.<sup>3-5</sup> Therefore, the guideline should focus on and/or specify that the primary source of fat in the diet should be from minimally processed, plant foods.

We acknowledge the weight of evidence supporting recommendations to keep fat intake to <30% of energy for the maintenance of a healthy weight. However, recent data comparing high fat and low fat dietary patterns show large reductions to energy intake on very low fat plant based diets. It is acknowledged in the literature that regulation of energy intake is complex and cannot be defined or predicted by macronutrient percentage intake alone.<sup>6</sup> Thus, the focus must be on the nutrient quality of the overall dietary pattern and consumption of whole foods.<sup>7</sup>

To achieve the WHO targeted 25% reduction in premature mortality from non-communicable disease, messaging between recommendations for fat intake need to be aligned with the WHO's Global action plan for the prevention and control of NCDs 2013-2020.<sup>8</sup>

## **2. The guideline must explicitly address the link between fat recommendations with environmental impacts.**

As discussed by the Lancet Countdown,<sup>9</sup> “.. we argue that the health profession not only has the ability but the responsibility to act as public health advocates by communicating the threats and opportunities to the public and policy makers and ensuring climate change is understood as being central to human wellbeing.” (pp.582)

The effects on the global food supply from climate change are likely to be significant. Food security has been identified as one of the largest health impacts from climate change in the 21st Century.<sup>9</sup> Springmann et al.<sup>10</sup> utilised the International Model for Policy Analysis and predicted that by 2050, 529,000 excess deaths would occur due to changes to the food supply driven by climate change.

Given the tremendous impacts on global health, dietary recommendations by the WHO need to align with planetary goals to reduce environmental footprints of food production. This means high-consuming countries in particular must make a rapid shift away from animal-sourced and processed foods and instead obtain the majority of fat from minimally processed plant-based foods, such as wholegrains, fruits, vegetables nuts and legumes which have significantly lower environmental impact,<sup>11,12</sup> while providing reductions in relative risk for chronic diseases such as coronary heart disease, colorectal cancer, diabetes and stroke.<sup>11</sup>

## **3. An increasing body of evidence shows a diet based on whole-plant foods, with lower overall fat intake associated with improved health outcomes**

Although we acknowledge the body of evidence is still relatively small, increasing research surrounding ad-libitum low fat plant-based diets show numerous health benefits, including that of significant weight loss.

Participants following a 16 week, low-fat whole food plant-based diet, conducted by Kahleova et al.<sup>13</sup>, reported significant reductions to BMI, which were associated with reductions in dietary fat ( $r=0.51$ ,  $p<0.001$ ). The reduction to saturated fatty

acid intake (11.4% to 3.3% of energy post intervention) was related to improved insulin secretion and response.<sup>13</sup> Participants in this trial on the low fat plant-based diet achieved a fat intake of approximately 17.5% of energy.<sup>13</sup>

A recently published crossover trial involving 62 participants on either a Mediterranean diet or low fat plant-based diet, showed significant weight loss of 6.0kg in the plant-based group, with no weight loss in the Mediterranean group.<sup>14</sup> The low-fat plant-based diet comprised 17% fat (less than 5% of energy from saturated fat), which was associated with significantly greater improvements in insulin sensitivity and lipid concentrations when compared to the Mediterranean diet.<sup>14</sup>

The BROAD study in New Zealand included 65 patients randomised to either a control diet or a low-fat whole food plant-based diet (approximately 10% fat) for a period of six months. BMI was significantly reduced in the plant-based group when compared to usual care (4.4 vs 0.4 kg/m<sup>2</sup>).<sup>15</sup> Importantly, these studies did not provide food to participants and calories were not restricted.

These studies indicate that overall fat intake <20% of energy (with ideal intake 8-15%) and saturated fat intake comprising <5% of energy is associated with numerous health benefits, including weight loss.

In addition, the research highlighted above supports existing work by WHO, showing reductions to energy dense food intake can lead to significant reductions to energy intake and limit weight gain. Importantly, in the dietary patterns presented here, dietary fat was replaced with other whole plant-foods which are nutrient dense and satiating and independently associated with numerous health benefits. Therefore, WHO recommendations on fat intake should specify that reductions to fat intake should be accompanied by increased consumption of whole plant-foods to obtain the health benefits of this reduction.

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