

# Introduction - Statement on the effects of excess Vitamin A on maternal health

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## Introduction

1           The Scientific Advisory Committee on Nutrition (SACN) last considered maternal diet and nutrition in relation to offspring health in its reports on ‘The

influence of maternal, fetal and child nutrition on the development of chronic disease in later life' (SACN, 2011) and on 'Feeding in the first year of life' (SACN, 2018). In the latter report, the impact of breastfeeding on maternal health was also considered.

2 In 2019, SACN agreed to conduct a risk assessment on nutrition and maternal health focusing on maternal outcomes during pregnancy, childbirth and up to 24 months after delivery; this would include the effects of chemical contaminants and excess nutrients in the diet.

3 SACN agreed that, where appropriate, other expert Committees would be consulted and asked to complete relevant risk assessments e.g. in the area of food safety advice. This subject was initially discussed by COT during the horizon scanning item at the January 2020 meeting with a scoping paper being presented to the Committee in July 2020. This included background information on a provisional list of chemicals proposed by SACN. It was noted that the provisional list of chemicals was subject to change following discussion by COT who would be guiding the toxicological risk assessment process: candidate chemicals or chemical classes can be added or removed as the COT considered appropriate. The list was brought back to the COT with additional information in September 2020 ([TOX-2020-45 Maternal diet scoping paper \(food.gov.uk\)](#)). Following a discussion at the COT meeting in September 2020, it was agreed that papers on a number of components should be prioritised and to this end, papers on iodine, vitamin D and dietary supplements have been or will be presented to the Committee. The remaining list of compounds were to be triaged on the basis of toxicity and exposure.

4 Following discussion of the first prioritisation paper ([first prioritisation paper](#)) on substances to be considered for risk assessment by the COT, the Committee decided that Vitamin A should be considered in a specific paper.

## **Current UK Government and International advice**

5 UK Government advice as given on the [NHS.uk website](#) lists good dietary sources of vitamin A as cheese, eggs, oily fish, fortified low-fat spreads, milk, yoghurt and liver and liver products such as pate (NHS, 2021). Good sources of  $\beta$ -carotene are yellow, red or green (leafy) vegetables such as carrots, sweet potatoes, red peppers and spinach and fruit such as mango, papaya and apricots.

6 UK Government dietary advice, as given on the NHS website, recommends that pregnant women, or women thinking about having a baby, should not consume liver or liver products such as pate, or supplements that contain vitamin A, including fish liver oil, unless advised by a GP, to avoid potential harm to the unborn child.

7 The World Health Organisation (WHO, 2021) recommend that vitamin A supplementation be given to pregnant women only in areas where vitamin A deficiency is a severe public health problem, to prevent night blindness. WHO's recommendations are considered in more detail in paragraph 16 below.