Tidsskriftet Tidsskrift for Den norske legeforening

Follow-up of pregnant women, breastfeeding mothers and infants on a vegetarian or vegan diet

FROM THE SPECIALTIES

GRY HAY

gry.hay@helsedir.no
Gry Hay, Dr.Philos, nutritionist and senior advisor in the Norwegian Directorate of Health.
The author has completed the ICMJE form and declares no conflicts of interest.

LARS T. FADNES

Lars T. Fadnes, specialist in general practice, professor at the University of Bergen, research group leader at the Haukeland University Hospital, GP and member of the Norwegian Nutrition Council.
The author has completed the ICMJE form and declares no conflicts of interest.

HELLE MARGRETE MELTZER

Helle Margrete Meltzer, Dr.Philos., nutritionist and former research director at the Norwegian Institute of Public Health and a member of the Norwegian Nutrition Council.
The author has completed the ICMJE form and declares no conflicts of interest.

ERIK KRISTOFFER ARNESEN

Erik Kristoffer Arnesen, PhD candidate at the University of Oslo and member of the Norwegian Nutrition Council.
The author has completed the ICMJE form and declares no conflicts of interest.

CHRISTINE HENRIKSEN

Christine Henriksen, clinical nutritionist, associate professor of nutrition at the University of Oslo and member of the Norwegian Nutrition Council.
The author has completed the ICMJE form and declares no conflicts of interest.

Vegetarian and vegan diets may be suitable at all life stages if they are well planned and supplemented with some vitamins and minerals.

The Norwegian Nutrition Council recently issued an expert opinion on vegetarian and vegan diets (1). This gives advice on how healthcare personnel can assist families with a vegetarian or vegan diet.

Pregnant women, breastfeeding mothers and infants have a particular need for an adequate supply of nutrients for both the growth and development of the child and the health of the mother. With good planning, vegetarian and vegan diets can cover the need for nutrients at these life stages (2). Such diets have a rich content of a range of vitamins, minerals and dietary fibre. The health benefits include a reduced risk of pre-eclampsia and obesity as well as lower exposure to environmental toxins (3).

At the same time, a restricted or unbalanced diet can lead to a deficiency of important vitamins and minerals such as vitamin B_{12}, vitamin D and iodine, resulting in serious consequences for the child. These nutrients are essential for the foetal brain and nervous system, and for the normal development of the child. Mothers should therefore be given the opportunity to have their vitamin B_{12} and vitamin D status measured in the early stages of pregnancy, in addition to the standard measurements of iron status. Iodine status is difficult to measure but intake can be estimated by asking about the use of dietary supplements containing iodine, and the use of dairy products or plant-based drinks fortified with iodine.

A healthy and balanced vegetarian or vegan diet can be composed of legumes (beans, lentils, peas), whole-grain cereals, vegetables, fruit, berries, nuts, seeds and plant oils, low-fat dairy products or plant-based drinks and eggs, if included in the diet.

From the time the pregnancy is planned, pregnant women and breastfeeding mothers should take a multi-vitamin and mineral tablet daily (containing 400 µg folate among other things) and an algae oil supplement containing the omega-3 fatty acid docosahexaenoic acid (DHA). Iron supplements should also be taken if required. Daily intake of 0.5 litres of a calcium-fortified plant-based drink will help to cover calcium needs. Seaweed and kelp (in particular) can contain harmful amounts of iodine and should be used with care.

Infants and young children

If the family has a vegetarian or vegan diet, it is highly advantageous if the child receives breast milk for the entire first year of life and longer, if possible. If the mother ensures that she has an adequate intake and status of vitamin B_{12} and iodine, an exclusively breastfed baby only needs vitamin D supplements. If the baby cannot be given breast milk or needs more milk than the mother can supply, infant formula based on cows' milk or soya is the only alternative.

Children should not have a strict, unbalanced diet. If the increase in body weight is too low, more breast milk/infant formula, more meals and more fat should be included in the child's diet. When the child is no longer exclusively breast fed, or the mother's status is uncertain, the child should receive a supplement containing vitamin B_{12}, iodine and vitamin D.

A liquid, vegan supplement for infants is available. When the child begins with solid foods, they should also be given DHA in the form of algae oil (vegetarian omega 3).

Advice on healthy vegetarian and vegan diets for different groups can be found on the website Helsenorge.no.

REFERENCES

1. Nasjonalt råd for ernæring. Vegetar- og vegankost – ekspertuttalelse fra Nasjonalt råd for ernæring. Publisert 27.9.2021. https://www.helsedirektoratet.no/rapporter/vegetar-og-vegankost-ekspertuttalelse-fra-nasjonalt-rad-for-ernaering Accessed 16.3.2022.

2. Melina V, Craig W, Levin S. Vegetarian Diets. J Acad Nutr Diet 2016; 116: 1970–80. [PubMed][CrossRef]

3. Baroni L, Goggi S, Battaglino R et al. Vegan Nutrition for Mothers and Children: Practical Tools for Healthcare Providers. Nutrients 2018; 11: 5. [PubMed][CrossRef]

Publisert: 27 April 2022. Tidsskr Nor Legeforen. DOI: 10.4045/tidsskr.21.0847
Received 3.12.2021, first revision submitted 12.3.2022, accepted 17.3.2022.