

Dairy & Acne:

The latest science and advice



What is Acne?

Acne (acne vulgaris) is a chronic inflammatory skin disease, that can be mild or severe.

Guiding Patients on what causes Acne:

Acne is usually caused by a mix of genetics and hormones. Factors that increase risk of developing acne, include family history, oily skin type, hormonal changes at different life stages, smoking and increasing body mass index (BMI).

There is no strong evidence linking any specific food with acne and yet the idea that dairy causes acne is often circulated in the media and online. This is likely because early studies found weak associations between milk and breakouts, which easily got amplified.

The Scientific Evidence:

While many studies have not found any association between dairy consumption and acne frequency or severity, some studies, albeit of the 'observational' type, have. Interestingly, in this observational data the association appeared to be stronger for skimmed and low-fat milk than for whole milk. There are unfortunately, no intervention trials examining the effect of dairy and acne. Diet has been connected to acne through the assumption that high glycaemic index (GI)

diets and milk consumption can increase insulin and IGF-1. Studies show that people with acne often have higher levels of IGF-1. However, because IGF-1 hormone is made up of proteins it will be broken down by gastric enzymes during digestion and so the IGF-1 found in milk is unlikely to be absorbed in its active form after making its way through the digestive system.

Advice for Patients:

There is no specific dietary approach for treating acne due to limited evidence and potential risks of nutrient deficiencies. The UK's National Institute for Health and Care Excellence (NICE) guidelines included that there was insufficient evidence to recommend restricting dairy.

Milk and dairy foods are the major source of calcium and iodine in the diets of Irish adolescents, who need 1,150mg of calcium per day according to the European Food Safety Authority. Thus, **removing dairy products from the diets of adolescents, without substitution, may negatively affect calcium and iodine intakes.** It is important that patients are referred to a registered dietitian if a milk-free diet is being trialled for acne patients to ensure their calcium, iodine and protein requirements are being met.

Helping Patients Make Informed Dietary Choices to Manage Acne:

NICE guidelines do not recommend a specific dietary approach for treating acne

The Classic Balanced diet: Advice on healthy eating is important for everyone, including those living with acne e.g., increasing fibre, fruits, vegetables and wholegrains, fish consumption and staying hydrated while reducing the consumption of high-GI foods.



Dairy and Acne: NICE guidelines on acne concluded that there is no significant evidence to recommend restricting milk or dairy products. Dairy products contribute greatly to the Irish population's intake of calcium and iodine. Milk is a source of riboflavin (B2) and iodine, which both contribute to the maintenance of normal skin.

Low-GI diets: Although there is some evidence to suggest that a low-GI diet may improve acne, NICE guidelines remain cautious. Recommend an increase in wholegrains and fibre and help patients to include these as part of a balanced diet.

Practice points:

- Screen for risk of inadequate calcium or iodine intake if a patient has self-eliminated dairy.
- Discourage at-home intolerance testing

General Practitioners, Practice Nurses and Dermatologists:

- Refer to a dietitian for tailored guidance, particularly for adolescents or young women at risk of bone health issues

Dietitians and Registered Nutritionists:

- Discuss Omega-3 and Acne - Although there are no official guidelines for this, studies suggest that the anti-inflammatory effects of Omega-3 fatty acids can help reduce the severity of acne.

Resources:

All nutrition booklets are available on [NDC.ie/publications](https://www.ndc.ie/publications)



Deep dive into the science in NDC DN Forum

Access NDC's Acne Booklet for Patients

