



# Milk spots

Nutritionist **Kim Pearson** on the link between dairy and acne

**A**cne is the most common skin disease of Western civilisation affecting more than 85% of adolescents<sup>1</sup> as well as a significant percentage of adults. The impact of acne on an individual's quality of life cannot be underestimated.

As clinicians and therapists working within medical aesthetic settings, many of us are regularly presented with the opportunity to treat and support individuals with acne. I strongly believe that it is important to not only address skin concerns from the outside, but to also consider how diet may be adversely affecting skin health.

We are becoming increasingly aware of the link between diet and acne. Once dismissed by many medical professionals, literature now supports anecdotal evidence from individuals who believe that consuming dairy products exacerbates or triggers their acne flare-ups.

Many people believe that the fat content of dairy products is responsible for promoting acne, however this is unlikely to be the case. One 2005 study looked at high school dietary dairy intake and teenage acne. The researchers hypothesised that milk may have triggered acne not due to the fat content, but because of the hormones and bioactive molecules naturally present in milk

## EXAMINING THE EVIDENCE

In 2009, a systematic literature review was carried out to investigate the association between acne and diet. 21 observational studies and six clinical trials were evaluated.

Observational studies, including two large controlled prospective trials, reported that cow's milk intake increased the prevalence and severity of acne. Based on these findings, researchers concluded "there exists convincing data supporting the role of dairy products in influencing hormonal and inflammatory factors, which can increase acne prevalence and severity".<sup>2</sup>

Many people believe that the fat content of dairy products is responsible for promoting acne, however this is unlikely to be the case. One 2005 study looked at high school dietary dairy intake and teenage acne. Researchers found a positive association between acne and intake of total milk as well as skim milk.

The researchers hypothesised that milk may have triggered acne not due to the fat content, but because of the hormones and bioactive molecules naturally present in milk.<sup>3</sup>

Acne is impacted by diets that increase insulin and insulin-like growth factor 1 (IGF-1) signalling. IGF-1 stimulates sebum production, a well known cause of acne breakouts. Milk consumption significantly increases serum levels of hormones insulin and IGF-1, comparable with the effects high glycaemic food. Low glycaemic diets that are also low in milk protein reduce IGF-1 signalling.<sup>4</sup>

Trialling an elimination diet is the simplest and most effective way to identify whether dairy is triggering an individual's acne breakouts. It is recommended that dairy is completely avoided for a minimum of four weeks in order to establish this.

Dairy products are hidden in many food products you wouldn't necessarily expect so advise patients to read labels carefully. As a common allergen, the Food Standards Agency states that dairy must be emphasised on the ingredients list (most often highlighted in bold font).

#### ALTERNATIVES TO POPULAR DAIRY PRODUCTS:

- Swap butter for coconut oil
- Swap milk for unsweetened nut milk (such as almond) or coconut milk
- Swap yoghurt for coconut milk yoghurt
- Swap cheese for vegan cheese or other natural savoury foods such as olives
- Swap milk chocolate for organic dark chocolate (minimum 70% cocoa solids)

In summary, unless a known trigger has already been identified, it is always worth advising acne patients to minimise consumption of high glycaemic foods and to trial a dairy elimination diet. Dietary changes can be a long term solution to reducing and even eliminating acne breakouts in some individuals. **AM**

#### REFERENCES

1. Melnik BC (2011) Evidence for acne-promoting effects of milk and other insulinotropic dairy products. Nestle Nutr Workshop Ser Pediatr Program 67:131-45
2. Ferdowsian HR1, Levin S. (2010) Does diet really affect acne? Skin Therapy Lett. 15(3):1-2, 5.
3. Adebamowo CA1, Spiegelman D, Danby FW et al (2005) High school dietary dairy intake and teenage acne. J Am Acad Dermatol. 52(2):207-14.
4. Melnik BC, Schmitz G. (2009) Role of insulin, insulin-like growth factor-1, hyperglycaemic food and milk consumption in the pathogenesis of acne vulgaris. Exp Dermatol. 18(10):833-41.



>> **Kim Pearson** qualified as a nutritionist in 2008, her specialities include weight management, healthy ageing and skin health. She writes articles and provides professional comments for a wide range of magazines, newspapers and medical journals and has appeared on national television and radio.

Kim speaks at conferences and trains health care professionals in nutrition and diet. She is a member of the CNHC, BANT and the Guild of Health Writers.

Welcome to the  
home of  
Aesthetic Excellence

**V**

VidaAesthetics

PDO threads

Mesotherapy

Skin Peels

Mesotherapy Gun

Oxygen Needling

Carboxytherapy

Radiofrequency

Ultrasound

Electroporation

Skin Care

Training Courses

After Sales

Support

#### PDO Courses Available

- Basic
  - Advanced
  - Advanced 2
- with

**Dr. Irfan Mian**

Invented and pioneered the 'MASH' technique, which is a registered, copyright-protected technique.

CALL US TODAY ON 01306 646526  
WWW.VIDA-AESTHETICS.COM