

School and Nursery Milk Alliance snma@snma.org.uk

RT Hon Matt Hancock MP Secretary of State for Health and Social Care Department of Health and Social Care 39 Victoria Street London SW1H 0EU

Dear Secretary of State,

I am writing on behalf of the School and Nursery Milk Alliance to express my concern about recent calls from Plant Based Health Professionals UK to scrap free school milk in schools, and instead offer plant-based milks. The overarching aim of the School and Nursery Milk Alliance is to protect the existing school and nursery milk schemes that provide all nursery age and young school children with free and subsidised milk during the school day.

The Nursery Milk Scheme, which is funded by the Government, entitles all children in England, Wales and Scotland under the age of 5 to receive a free $1/3^{rd}$ pint of milk while in attendance at a registered day care provider for two or more hours a day. It funds milk for approximately 1.5 million children across the country.

The unrivalled nutritional content of milk

Milk provides children with an energy boost and keeps them hydrated between meals, helping them to concentrate and learn. Most importantly, it provides an unparalleled source of nutrients essential for growth and development, including calcium, iodine, phosphorus, potassium, protein and vitamins B2 and B12. It is very difficult for children to meet nutrient requirements if milk is absent from their diet.

A review of the totality of available scientific evidence relating to the health impacts of dairy products correlated milk consumption with a lower risk of obesity in children as well as a lower risk of developing type 2 diabetes.¹ Another study found that children who consume milk and milk products are more likely to achieve a lean body phenotype as milk increases lean mass while decreasing gain in percentage body fat.² The same study recommends that children "should be encouraged to add milk and milk products to their diet in sufficient amounts" in order to reach healthy nutrient intakes.³ Sufficient dietary calcium and protein are vital to attaining optimal peak bone mass during skeletal growth in childhood.

Plant-based alternatives to milk are not rich sources of vital nutrients

Plant-based alternatives to milk are nutritionally incomparable. Research has shown that vegan diets typically fall short of the recommended daily intake for calcium and can even lead to nutritional deficiencies in children. Kwashiorkor, a form of protein-energy malnutrition, has also been observed in infants that consume a rice-based vegan diet.⁴ A comparison of the nutrient components with respect to the energy yield (rather than mass) of food found that milk (19 mg calcium/kcal) is a much better source of calcium compared to almonds (0.46 mg calcium/kcal) and soybean (0.62 mg calcium/kcal).⁵

The protein contents of plant-based alternatives to milk are also significantly low. Per 100g, milk provides between 3.5g (full fat) and 3.6g (low fat) of protein, oat drinks provide 0.93g (fortified) and 0.35g (unfortified) while almond drinks provide 0g of protein in both fortified and unfortified forms.⁶ A study found that plant-based alternatives to milk, including almond, rice and soya drinks, caused severe protein-

calorie malnutrition in infants when substituted for milk in formula. The same study reported that "milk alternative beverages expose infants to severe nutritional deficiencies" and that "measures forbidding their use in young infants should be organised. Another study found an increased occurrence of dysuria, haematuria, and kidney stones in children who consume inappropriate amounts of almond drinks. Not only is it misleading to present plant-based alternatives as nutritionally equivalent to milk – it is also dangerous.

Now more than ever, our children need access to high-quality, nutrient-rich food

The UK is facing a rising malnutrition crisis, and non-dairy alternatives to milk do not offer anywhere near the same nutrition content as milk. An estimated 8.4 million people in the UK cannot afford to buy nutritious food and one in 10 children are living in households that report experiencing severe food insecurity. Across the country, there has been a dramatic rise in the use of foodbanks and families with three or more children are among the groups most likely to rely on them.

At the same time one in ten children is obese by age 5 – one in five by age 11 – with the risk of obesity being greater among children from food-insecure households. Obesity continues to soar beyond its already high level, fuelling a diet-related health crisis with escalating rates of type 2 diabetes, cardiovascular disease and other non-communicable diseases. This presents an increasing burden on the National Health Service (NHS): in England, obesity alone costs the NHS more than £6 billion a year, which is set to reach £10 billion by 2050. Diabetes adds on a further £10 billion in costs per year to the NHS.

Rising levels of food insecurity and childhood obesity in the UK are indicators of a wider inability to meet the nutrient needs of the population, especially children.

It's time to protect the health of the nation, starting with children

There is too little evidence to suggest that plant-based alternatives will equal the nutrient and health benefits of milk. Until more research has been conducted and a scientifically sound conclusion can be drawn, health authorities must exercise caution when recommending plant-based alternatives as nutritionally adequate substitutes to milk in children's diets.

As the costs of malnutrition-related health crises continue to spiral, the potential of milk and other dairy products to reduce the overall risk of chronic non-communicable diseases, especially in children, cannot be disparaged or ignored. The School and Nursery Milk Alliance calls upon you, as the Secretary of State for Health and Social Care, to prioritise the health of our children and protect the provision of proper milk in nurseries.

We look forward to hearing from you.

Yours sincerely,

Dr Hilary Jones

Spokesperson, The School and Nursery Milk Alliance

¹ Thorning, T. K., et al. 'Milk and Dairy Products: good or bad for human health? An assessment of the totality of scientific evidence.' Food Nutri. Res. 2016. 60. p.2

² Ellis D, Lieb J. 'Hyperoxaluria and genitourinary disorders in children ingesting almond milk products.' *J Pediatr*. 2015. 167(5). p.259

³ Ibid. pp.259-260

⁴ Vanga, S. K., and V. Raghavan. 'How well do plant-based alternatives fare nutritionally compared to cow's milk?' *J Food Sci Technol.* 2018. 55(1). p.15

⁵ Ibid. p.18

⁶ Roos, E., et al. 'The role of dairy and plant based dairy alternatives in sustainable diets.' *SLU Future Food Reports*. 2018. 3. p.64

⁷ Le Louer, B., et al. 'Severe nutritional deficiencies in young infants with inappropriate plant milk consumption.' *Arch Pediatr*. 2014. 21(5). p.483

⁸ Ibid.

⁹ Ellis D, Lieb J. 'Hyperoxaluria and genitourinary disorders in children ingesting almond milk products.' *J Pediatr*. 2015. 167(5).

¹⁰ Food Foundation. Too poor to eat: 8.4 million struggling to afford to eat in the UK [online] Food Foundation. 2016. Available at: hhtp://www.foodfoundation.org.uk/too-poor-to-eat-8-4-million-struggling-to-afford-to-eat-in-the-uk

¹¹ Barker, C., Obesity Statistics. (House of Commons No. 3336). 2019. p.3

¹² Scott, C., et al., Affordability of the UK's Eatwell Guide. Food Foundation. 2018. p.2

¹³ Ibid.