

Critical Review:

Does consuming dairy products, specifically milk, compared to not consuming dairy lead to mucus production in healthy individuals?

Hannah Collins & Alexandra Riley

M.Cl.Sc SLP Candidates

University of Western Ontario: School of Communication Sciences and Disorders

Many people have for many years held the belief that dairy products and specifically milk intake can cause mucus production or excessive mucus. (Lee & Dozor, 2004). Lee & Dozor (2004) have termed this belief the Milk-Mucus effect (MME). The primary objective of this critical analysis was to evaluate the literature investigating the effects of dairy products on mucus production. Critically evaluated studies included: two literature reviews, one randomized double-blinded controlled trial, two single group design case studies, and one randomized double-blind trial. Selection criteria excluded studies investigating the MME in individuals with asthma. Results suggested that consuming dairy products, specifically milk, may affect an individual's sensory perception, the release rate of stored mucus, or effect ones' mucus based on the osmotic properties or viscosity of milk. However, the consumption of dairy products does not necessarily initiate mucus production.

Has anyone ever told you to avoid drinking milk or eating other dairy products when you have a cold or flu? What about before a big vocal performance? For many years, many people have held the belief that dairy products and specifically milk intake can increase mucus production or cause excessive mucus. This effect is often termed the Milk-Mucus Effect (MME) (Lee & Dozor, 2004). Arney and Pinnock (1993) defined the MME as a "phenomenon in which cough and/or sensations relating to the thickness of saliva or mucus are experienced in the throat for a period of up to 24 hours after the ingestion of a small volume of milk."

Despite a small body of current research suggesting that this belief is not scientifically supported, a 2004 study found that 58.5% of parents reported believing that milk increases mucus. In fact, 28% of parents reported being told this fact by a physician (Lee & Dozor, 2004).

Within voice management research, evidence has suggested that excessive mucus can cause the sensation of post-nasal drip. Everyone has a coating

of mucus lining the inside of their nasopharynx as well as the rest of the pharynx. Individuals do not actively feel or perceive this coating of mucus, but it is always there. The issue arises when one starts to perceive this mucus because it becomes thicker or more excessive. Post-nasal drip can result in increased throat clearing and coughing which can cause damage to the vocal folds and may perpetuate voice problems. (Bonilha,

sensory perceptions, the release rate of stored mucus, or affect ones' mucus based on the osmotic properties or viscosity of milk. However, milk products do not necessarily lead to excess mucus production. However, within these analyzed studies there are weaknesses regarding the methods, design of the study, biased definitions of the MME, and generalization to clinical settings.

Future research considerations

Evidence shows that the MME is perceived and believed by a lot of people but, excessive mucus production cannot be physically captured in the studies

