Sensitization to human milk.

BACKGROUND: Allergy to milk is one of the earliest manifestations of IgE-mediated allergies and affects about 2.5% of newborn children. Several reports indicate that milk-allergic patients may be sensitized also to human milk proteins. OBJECTIVE: To analyse the specificity and possible biological relevance of IgE reactivity to human milk antigens in milk-allergic patients.

METHODS: The specificity of IgE reactivity to cow’s milk and human milk antigens was analysed with sera from milk-allergic children and adults by IgE immunoblotting. IgE cross-reactivity between milk antigens was studied by immunoblot inhibition experiments. That IgE reactivity to human milk antigens is not due to alloreactivity or due to the transmission of foreign antigens into mother’s milk was demonstrated through the analysis of milk samples from genetically unrelated mothers before and after intake of dietary milk products. The biological relevance of IgE reactivity to human milk was confirmed by skin testing. Results IgE antibodies to human milk were found in more than 80% of the tested milk-allergic patients. Cross-reactive IgE-reactive human antigens such as alpha-lactalbumin and non-cross-reactive human milk antigens were identified. Immediate-type skin reactions could be elicited with human milk samples in patients with IgE reactivity to human milk.

CONCLUSION: IgE reactivity to human milk in milk-allergic patients can be due to cross-sensitization and...
genuine sensitization to human milk and may cause allergic symptoms. IgE-mediated sensitization to human milk is common in milk-allergic patients and may require diagnostic testing and monitoring.