

M.Sc. in Nutritional Medicine

Module 5 Diet, The Gut, Food Allergy and Intolerance 22-24 April 2013

Food Allergy and Intolerances

Dr. Janice Joneja

REFERENCES:

Source of data cited on slides and additional resources:

Aalberse RC, van Milligen F, Tan KY, Stapel SO. Allergen-specific IgG4 in atopic disease. *Allergy* 2003;48(8):559-569

Alm B, Aberg N, Erdes L, Mollberg P, Pettersson R, Norvenius G, Goksor E, Wennergren G. Early introduction of fish decreases the risk of eczema in infants. *Arch Dis Child* 2009;94:11-15

American Academy of Allergy and Clinical Immunology/NIAID: Adverse reactions to foods. NIH Publication 84-2442:1-6, 1984

Bishop JM, Hill DJ, Hosking CS. Natural history of milk allergy: Clinical outcome. *J Pediatrics* 1990;116(6):862-867

Blanco, C. Latex-fruit syndrome. *Curr Allergy Asthma Rep.* 2003;3(1):47-53

Blumchen K, Ulbricht H, Staden U, Dobberstein K, Beschorner J, de Oliveira LC, Shreffler WG, Sampson HA, Niggemann B, Wahn U, Beyer K. Oral peanut immunotherapy in children with peanut anaphylaxis. *J Allergy Clin Immunol* 2010;26(1):83-91

Boyce JA, Assa'ad A, Burks AW, Jones SM, Sampson HA, Wood RA, Plaut M, Cooper SF, Fenron MJ, et al. Guidelines for the diagnosis and management of food allergy in the United States: Report of the NIAID-sponsored expert panel. *J Allergy Clin Immunol* Dec 2010;126(6):S1-S58

Calvani M, Alessandri C, Sopo SM, Panetta V, Pingitore G, Tripodi S, Zappalà D, Zicari AM. Consumption of fish, butter and margarine during pregnancy and development of allergic sensitizations in the offspring: role of maternal atopy. *Pediatric Allergy and Immunology* 2006;17(2):94-102

Caminiti L, Passalacqua G, Barberi S, Vita D, Barberio G, De Luca R, Battista G. A new protocol for specific oral tolerance induction in children with IgE-mediated cow's milk allergy. *Allergy Asthma Proc* 2009;30(4):443-448

Chafen JJ, Newberry SJ, Riedl MA, Maglione M, Suttorp MJ, Sundaram V, Paige NM, Towfigh A, Hulley BJ, Shekelle PG. Diagnosing and managing common food allergies: a systematic review. JAMA 2010;303(18):1848-1856

Clark AT, Islam S, King Y, Deighton J, Anagnostou K, Ewan PW. Successful oral tolerance induction in severe peanut allergy. Allergy 2009;64(8):1218-1220

Dannaeus A, Inganas M. A follow-up study of children with food allergy. Clinical course in relation to serum IgE- and IgG-antibody levels to milk, egg and fish. Clin Allergy 1981; 11:533-539

Dellon ES Eosinophilic esophagitis Gastroenterol Clin North Am. 2013 Mar;42(1):133-153.

de Vrese M, Stegelmann A, Richter B, Fenselau S, Laue C, Schrezenmeir J. Probiotics--compensation for lactase insufficiency. Am J Clin Nutr 2001; 73 (Suppl. 2):421S-429S

Du Toit G, Katz Y, Sasieni P, Mesher D, Maleki SJ, Fisher HR, Fox AT, Turcanu V, Zadik-Mnuhin G, Cohen H, Livne I, Lack G. Early consumption of peanuts in infancy is associated with a low prevalence of peanut allergy. J Allergy Clin Immunol 2008 Nov;122(5):984-991

Fisher HR, Toit GD, Lack G. Specific oral tolerance induction in food allergic children: is oral desensitization more effective than allergen avoidance? A meta-analysis of published RCTs. Arch Dis Child 2011;96(3):259-264

Fleischer DM, Conover-Walker MK, Christie L, Burks AW, Wood RA. The natural progression of peanut allergy: Resolution and the possibility of recurrence. J Allergy Clin Immunol; 2003;112(1):183-189

Fleischer DM, Conover-Walker MK, Christie L, Burks AW, Wood RA. Peanut allergy: Recurrence and its management. J Allergy Clin Immunol 2004;114(5):1195-1201

Fleischer DM, Conover-Walker MK, Matsui EC, Wood RA. The natural history of tree nut allergy. J Allergy Clin Immunol 2005;116:1087-1093

Greer FR, Sicherer SH, Burks AW, and the Committee on Nutrition and Section on Allergy and Immunology. Effects of Early Nutritional Interventions on the Development of Atopic Disease in Infants and Children: The Role of Maternal Dietary Restriction, Breastfeeding, Timing of Introduction of Complementary Foods, and Hydrolyzed Formulas. Pediatrics 2008;121(1):183-191

Groschwitz KR, Hogan SP. Intestinal barrier function: molecular regulation and disease pathogenesis J Allergy Clin Immunol. 2009 Jul;124(1):3-20; quiz 21-2.

Halmepuro L, Vuontela K, Kalimo K, Bjorksten F. Cross-reactivity of IgE antibodies with allergens in birch pollen, fruits and vegetables. *Int Arch Allergy Appl Immunol* 1984;74: 235-240

Hiller R, Laffer S, Harwanegg C, Huber M, Schmidt WM, Twardosz A, Barletta B, Becker WM, Blaser K, Breiteneder H, Chapman M, Crameri R, Duchêne M, Ferreira F, Fiebig H, Hoffmann-Sommergruber K, King TP, Kleber-Janke T, Kurup VP, Lehrer SB, Lidholm J, Müller U, Pini C, Reese G, Scheiner O, Scheynius A, Shen HD, Spitzauer S, Suck R, Swoboda I, Thomas W, Tinghino R, Van Hage-Hamsten M, Virtanen T, Kraft D, Müller MW, Valenta R. Microarrayed allergen molecules: diagnostic gatekeepers for allergy treatment. *FASEB J.* 2002;16(3):414-416

Høst A, Halken S, Muraro A, Dreborg S, Niggemann B, Aalberse R, Arshad SH, von Berg A, Carlsen KH, Duschén K, Eigenmann PA, Hill D, Jones C, Mellon M, Oldeus G, Oranje A, Pascual C, Prescott S, Sampson H, Svartengren M, Wahn U, Warner JA, Warner JO, Vandenplas Y, Wickman M, Zeiger RS. Dietary prevention of allergic diseases in infants and small children. *Pediatr Allergy Immunol.* 2008 Feb;19(1):1-4

Hourihane JO, Roberts SA, Warner JO. Resolution of peanut allergy: case control study. *BMJ* 1998;306:1271-1275

Johansson SGO, Hourihane JOB, Bousquet J, Brujinzeel-Koomen C, Dreborg S, Haahtela T, Kowalski ML, Mygind N, Ring J, van Cauwenberge P, van Hage-Hamsten M, Wüthrich B. A revised nomenclature for allergy. An EAACI position statement from the EAACI nomenclature task force. *Allergy* 2001;56:813-824

Joneja J Vickerstaff. *The Health Professional's Guide to Food Allergies and Intolerances*. Academy of Nutrition and Dietetics. Chicago. Jan 2013

Joneja, J.M.Vickerstaff *Dealing with Food Allergies in Babies and Children* Bull Publishing Company, Boulder, Colorado. October 2007

Joneja, J.M.Vickerstaff *Digestion, Diet and Disease: Irritable Bowel Syndrome and Gastrointestinal Function* Rutgers University Press, Piscataway, New Jersey. August 2004

Joneja, J.M.Vickerstaff *Dealing with Food Allergies: A Practical Guide to Detecting Culprit Foods and Eating a Healthy, Enjoyable Diet* Bull Publishing Company, Boulder, Colorado. May 2003

Joneja JM. Infant Nutrition – Where are We Now? *JPEN J Parenter Enteral Nutr.* 2012 Jan;36(1 Suppl):49S-55S

Joneja JMV and Carmona Silva C. Outcome of a histamine-restricted diet based on chart audit. *Journal of Nutritional and Environmental Medicine* 2001;11(4):249-262

Joneja, JMV. Oral allergy syndrome, cross-reacting allergens and co-occurring allergies. Journal of Nutritional & Environmental Medicine 1999;9(4):289-303

Kalliomäki M, Salminen S, Poussa T, Arilommi H, Isolauri E. Probiotics and prevention of atopic disease: 4-year follow-up of a randomised placebo-controlled trial. Lancet 2003; 361:1869-71

Kirjavainen PV, Arvola T, Salminen SJ, Isolauri E. Aberrant composition of gut microbiota of allergic infants: a target of bifidobacterial therapy at weaning? Gut. 2002 Jul;51(1):51-55

Kramer MS, Kakuma R. Maternal dietary antigen avoidance during pregnancy and /or lactation for preventing or treating atopic disease in the child. Cochrane Database Syst Rev. 2006;3:CD000133

Kull I, Bergstrom A, Lilja G, Pershagen G, Wickman M. Fish consumption during the first year of life and development of allergic diseases during childhood. Allergy 2006;61(8):1009-1015

Kurup VP, Fink JN. The spectrum of immunologic sensitization in latex allergy. Allergy 2001;56(2):2-12

Lucendo AJ, Arias A, González-Cervera J, Yagüe-Compadre JL, Guagnazzi D, Angueira T, Jiménez-Contreras S, González-Castillo S, Rodríguez-Domínguez B, De Rezende LC, Tenias JM. Empiric 6-food elimination diet induced and maintained prolonged remission in patients with adult eosinophilic esophagitis: A prospective study on the food cause of the disease. J Allergy Clin Immunol. 2013 Mar;131(3):797-804

Maintz L, Novak N. Histamine and histamine intolerance. Am J Clin Nutr. 2007;85:1185-1196

Morisset M, Moneret-Vautrin DA, Guenard L, Cuny JM, Frentz P, Hatahet R, Hanss Ch, Beaudouin E, Petit N, Kanny G.. Oral desensitization in children with milk and egg allergies obtains recovery in a significant proportion of cases. A randomized study in 60 children with cow's milk allergy and 90 children with egg allergy. Eur Ann Allergy Clin Immunol 2007 Jan;39(1):12-19

Niggemann B, Staden U, Rolinck-Werninghaus C, Beyer K. Specific oral tolerance induction in food allergy. Allergy 2007 Jan;61(1):808-811

Norris JM, Barriga K, Hoffenberg EJ, Taki I, Miao D, Haas JE, Emery LM, Sokol RJ, Erlich HE, Eisenbarth GS, Rewers M. Risk of celiac disease autoimmunity and timing of gluten introduction in the diet of infants at increased risk of disease. JAMA 2005;293:2343-2351

Patriarca G, Nucera E, Roncallo C, Pollastrini E, Bartolozzi F, De Paquale. Oral desensitizing treatment in food allergy: clinical and immunological results. Aliment Pharmacol Ther 2003;17:458-465

Perkin JE, The latex and food allergy connection. J Amer Dietetic Association 2000;100(11):1381-1384

Poole JA, Barriga K, Leung DY, Hoffman M, Eisenbarth GS, Rewers M, Norris JM. Timing of initial exposure to cereal grains and the risk of wheat allergy. Pediatrics. 2006 Jun;117(6):2175-2182.

Prescott SL, Bouygue GR, Videky D, Fiocchi A. Avoidance or exposure to foods in prevention and treatment of food allergy? Curr Opin Allergy Clin Immunol 2010;10(3):258-266

Rautava S, Kalliomäki M, Isolauri E. New therapeutic strategy for combating the increasing burden of allergic disease: Probiotics-A Nutrition, Allergy, Mucosal Immunology and Intestinal Microbiota (NAMI) Research Group report. J Allergy Clin Immunol. 2005 Jul;116(1):31-37

Rona RJ, Keil T, Summers C, Gislason D, Zuidmeer L, Sodergren E The prevalence of food allergy: as meta-analysis. J Allergy Clin Immunol 2007;120(3):638-646

Saarinen KM, Pelkonen AS, Makela MJ, Savilahti E. Clinical course and prognosis of cow's milk allergy are dependent on milk-specific IgE status. J Allergy Clin Immunol 2005;116(4):869-875

Sampson HA, Munoz-Furlong A, Campbell RL, Adkinson NF, Bock SA, Branum A, Brown SGA, Camargo CA, Cydulka R, Galli SJ, Gidudu J, Gruchalla RS, Harlor AD, Hepner DL, Lewis LM, Lieberman PL, Metcalfe DD, O'Connor R, Muraro A, Rudman A, Schmitt C, Scherrer D, Simons FE, Thomas S, Wood JP, Decker WW. Second Symposium on the Definition and Management of Anaphylaxis: Summary Report—Second National Institute of Allergy and Infectious Disease/Food Allergy and Anaphylaxis Network Symposium. Annals of Emergency Medicine 2006;47(4):373-380

Sampson HA. Food allergy. Part 1: Immunopathogenesis and clinical disorders. Current reviews of allergy and clinical immunology. J Allergy and Clin Immunol 1999; 103(5 part 1):717-728

Sanz ML, Gamboa PM, García-Figueroa BE, Ferrer M. Chem Immunol Allergy. In vitro diagnosis of anaphylaxis. 2010;95:125-140

Savage JH, Matsui EC, Skripak JM, Wood RA. The natural history of egg allergy. J Allergy Clin Immunol 2007;120(6):1413-1417

Skolnick HS, Conover-Walker MK, Koerner CB, Sampson HA, Burks W, Wood RA. The natural history of peanut allergy. J Allergy Clin Immunol 2001;107:367-374

Skripak JM, Matsui EC, Mudd K, Wood R. The natural history of IgE-mediated cow's milk allergy. J Allergy Clin Immunol 2007;120(5):1172-1177

Staden U, Rolinck-Werninghaus C, Brewe F, Wahn U, Niggemann B, Beyer K. Specific oral tolerance induction in food allergy in children: efficacy and clinical patterns of reaction. *Allergy* 2007 Nov;62(11):1261-1269

Stapel SO, Asero R, Ballmer-Weber BK, Knol EF, Strobel S, Vieths S, Kleine-Tebbe J; EAACI Task Force. Testing for IgG4 against foods is not recommended as a diagnostic tool: EAACI Task Force Report. *Allergy* 2008;63(7):793-796

Strobel S, Mowat A. Oral tolerance and allergic responses to food proteins. *Curr Opin Allergy Clin Immunol* 2006;6(3):207-213

UTMB University of Texas Medical Branch. SDAP - Structural Database of Allergenic Proteins <http://fermi.utmb.edu/SDAP/> Jan 2011

Venter C., Laitinen K, Vlieg-Boerstra B.

Review Article. Nutritional Aspects in Diagnosis and Management of Food Hypersensitivity—The Dietitians Role. *Journal of Allergy*. Volume 2012 (2012), Article ID 269376, 11 pages. doi:10.1155/2012/269376
<http://www.hindawi.com/journals/ja/2012/269376/>

Vieths S, Scheurer S, Ballmer-Weber B. Current understanding of cross-reactivity of food allergens and pollen. *Annals of the New York Academy of Sciences* 2002;964:47-68

Wagner S, Breiteneder H. The latex-fruit syndrome. *Biochem Soc Trans* 2001;30(Pt 6):935-940

Webber CM, England RW. Oral allergy syndrome: a clinical, diagnostic, and therapeutic challenge *Ann Allergy Asthma Immunol*. 2010;104(2):101-108

Zapatero L, Alonso E, Fuentes V, Martinez MI. Oral desensitization in children with cow's milk allergy. *J Investig Allergol Clin Immunol* 2008;18(5):389-396