

Comparison of food specific IgG vs. food specific IgG4

10/2015 DST Diagnostische Systeme und Technologien GmbH

Materials and Methods

1. Samples

- 30 different plasma samples were tested for IgG and IgG₄ (2 additional samples were tested only for IgG₄).
- Samples were selected from a normal population. Plasma samples were chosen to cover most of the reaction levels for IgG and IgG₄ for all tested foods
- 27 different food extracts were tested, see following slide
- → all together 1674 data points for IgG and IgG₄ testing

Materials and Methods

2. ELISA assay

- All ELISA plates are coated with the same food extracts in the same concentrations
- Differing dilution of plasma sample was used (IgG= 1:50, IgG₄= 1:10)
- Plates were run according to identical protocol
- Incubation of respective antibody conjugate (Anti-IgG or Anti-IgG₄) was conducted 60min at 37 °C
- All data gathered was integrated in the comparison

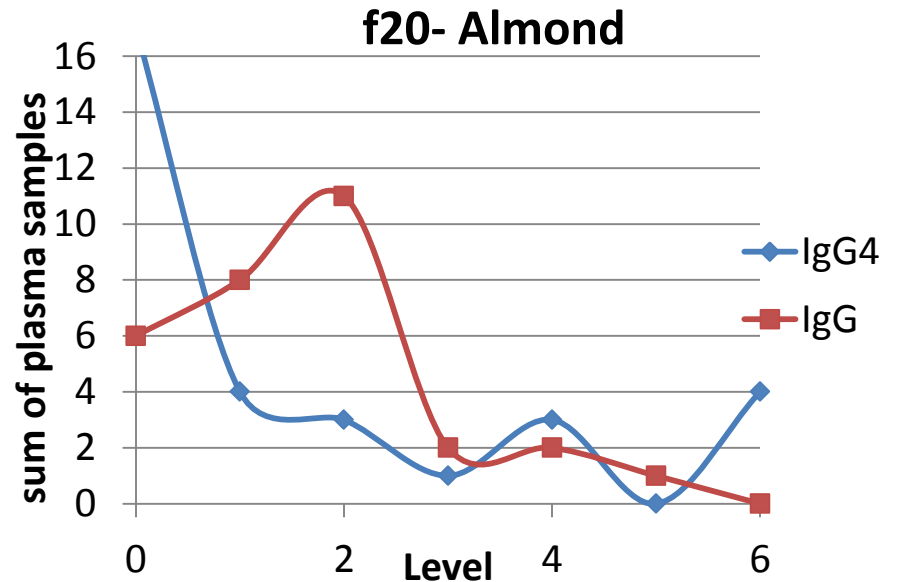
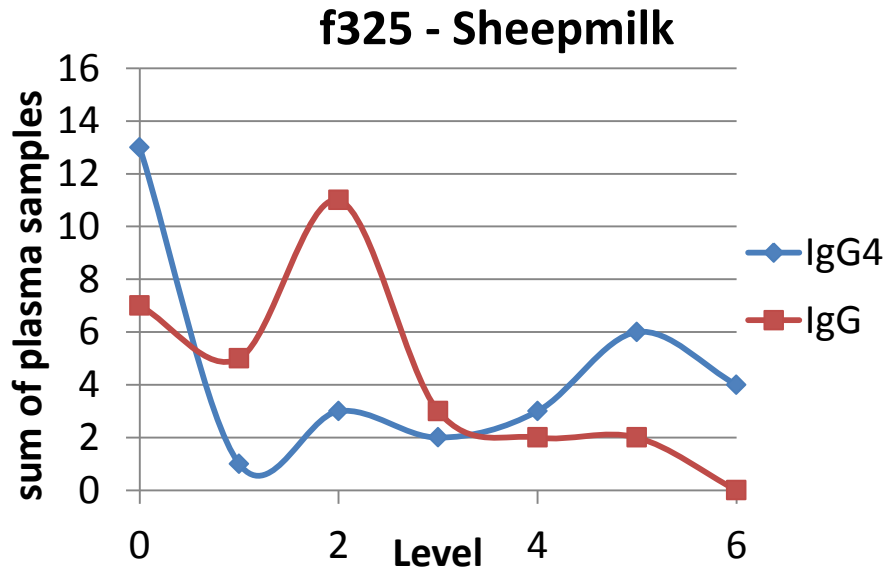
Food extracts

f4 Wheat	f45 Backer's yeast	f26 Pork	f20 Almond	f25 Tomato	f89 Mustard
f5 Rye	f199 Milk	f74 Egg	f49 Apple	f48 Onion	f14 Soybean
f7 Oat	f325 Sheepmilk	f41 Salmon	f84 Kiwi	f31 Carrot	
f9 Rice	f3 Cod	f13 Peanut	f29 Banana	f141 Champignon	
f11 Buckwheat	f24 Shrimp	f17 Hazelnut	f35 Potato	f950 Bean, green	

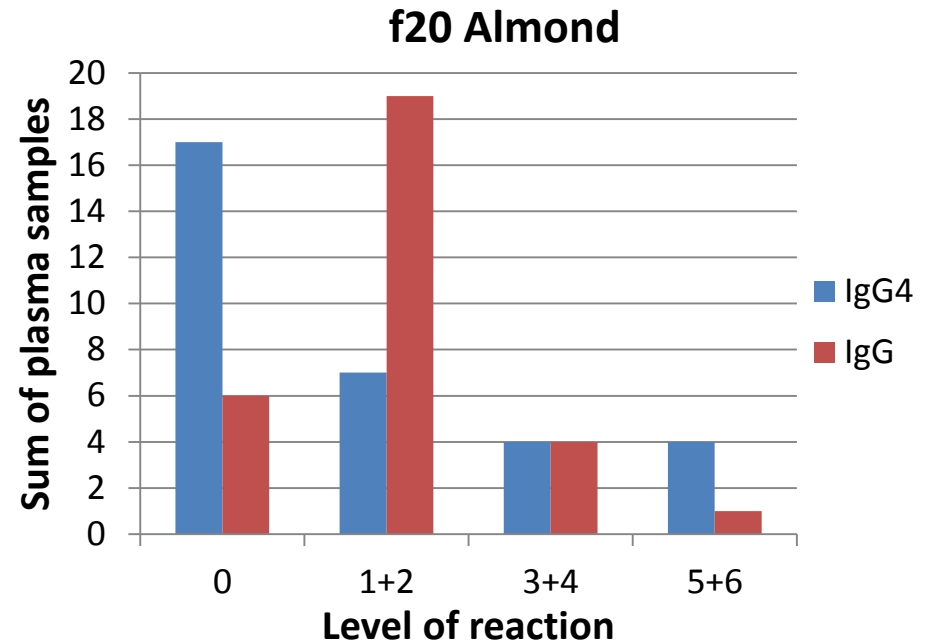
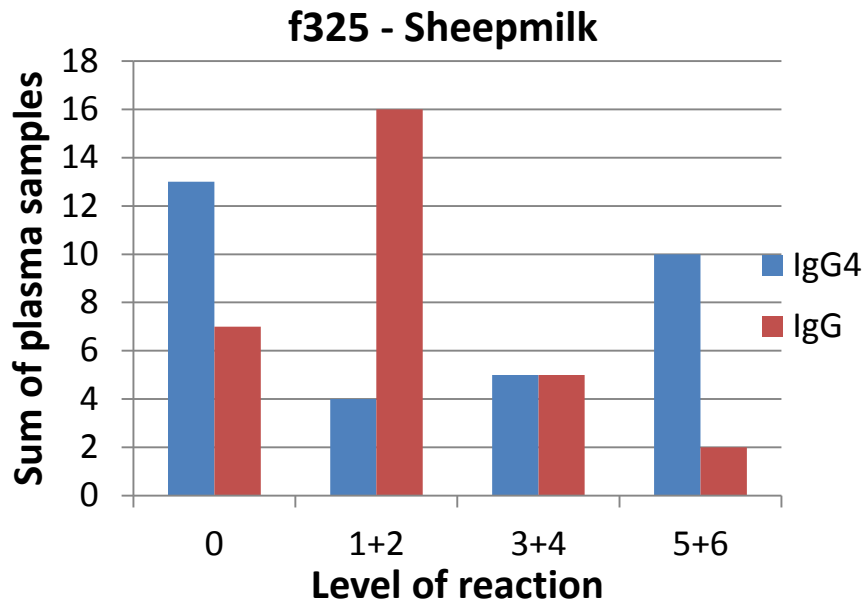
Comparision

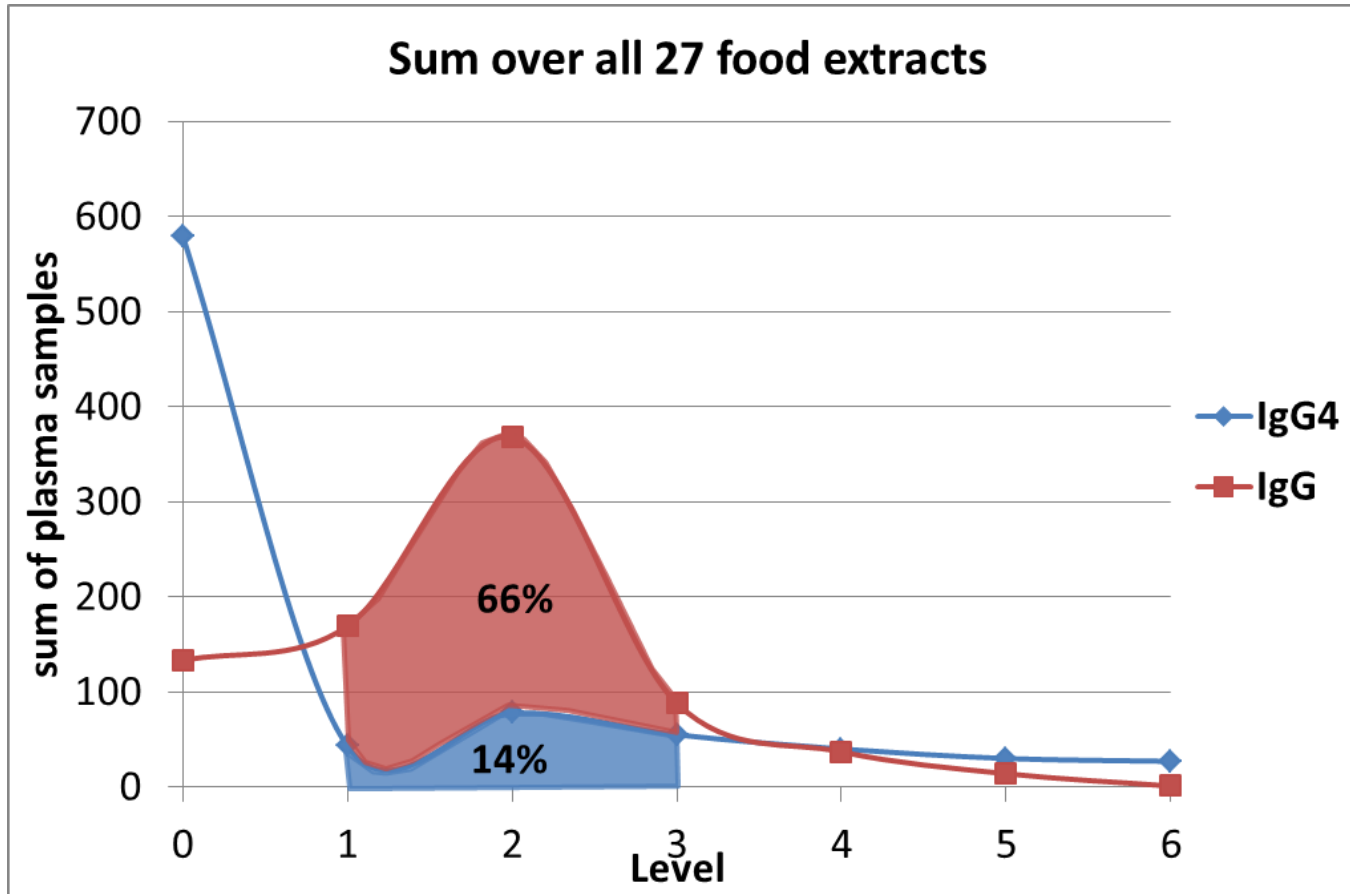
Up to 32 different plasma samples were tested.

1. Analysis: Sum of all available reaction levels for every food extract for IgG and IgG₄



2. Analysis: Sum of all negative results, class 1+2, class 3+4 and class 5+6 together

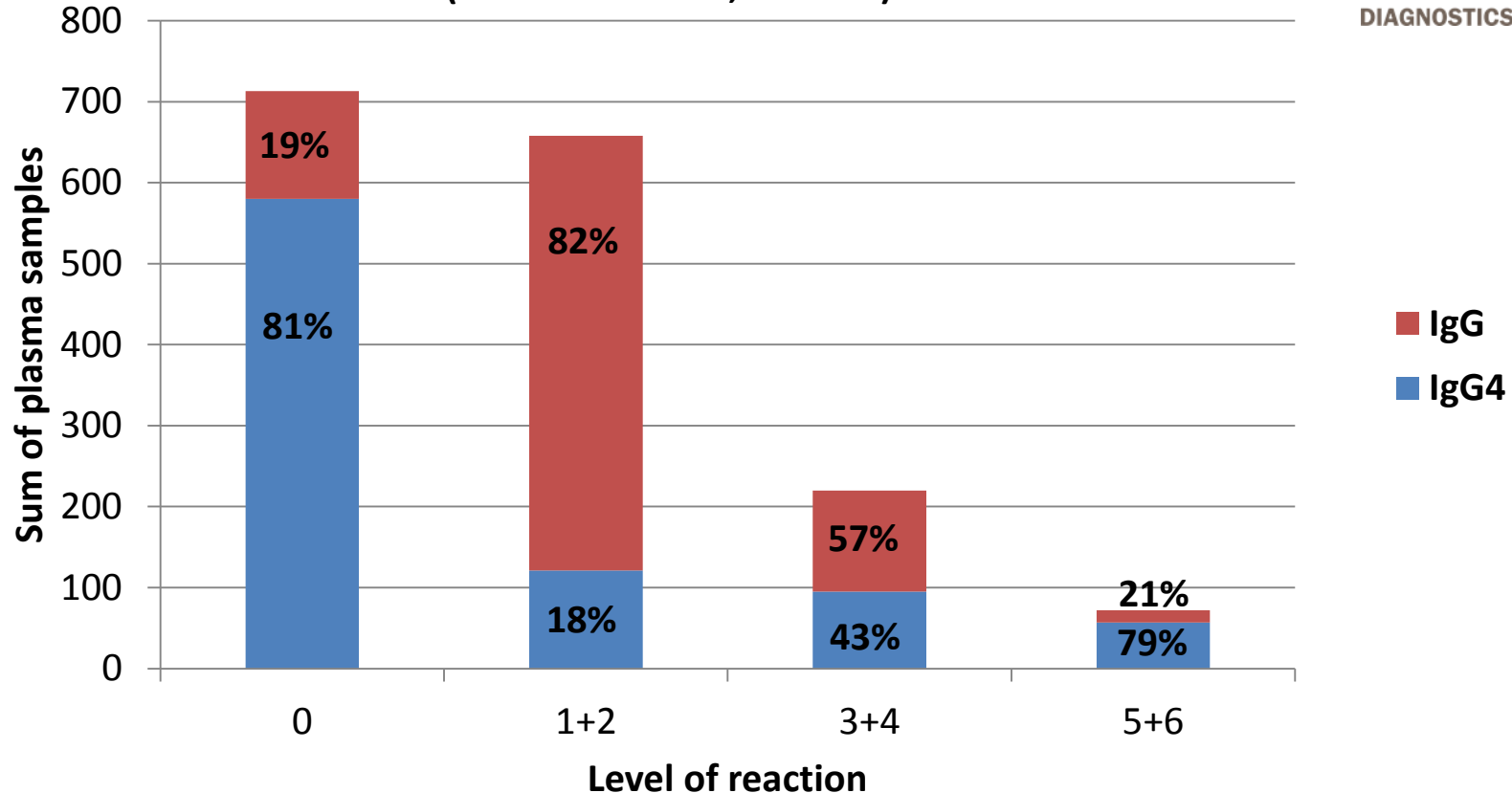




66% of all results for 27 food extracts belong to class 1 and 2 according to **IgG**

Only 14 % of all results for 27 food extracts belong to class 1 and 2 according to **IgG₄**

Sum of all results for shown reaction levels for IgG and IgG₄
(27 food extracts, 62 tests)



All 1674 datapoints were sorted by reaction level.

81% of more than 700 **negative** results were tested in IgG₄ ELISA

82% of all samples with the result of **reaction level 1 or 2** were tested in IgG ELISA.

