

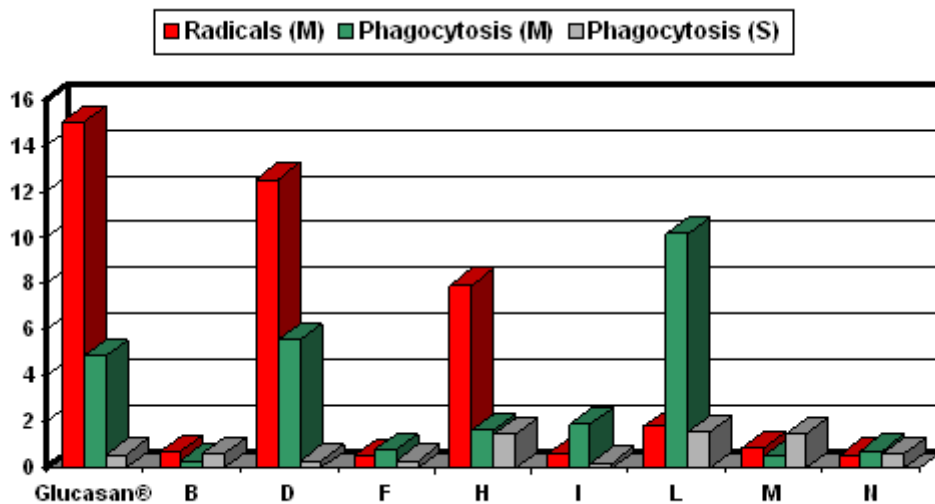


## Which (1-3),(1-6) Beta Glucan is most effective?

As discussed here: [Which beta glucan?](#) there has been an independent study - undertaken by FILT Diagnostics Berlin and supervised by Dr. med. Gunther Becher and Dr. rer. nat. Michael Rothe.

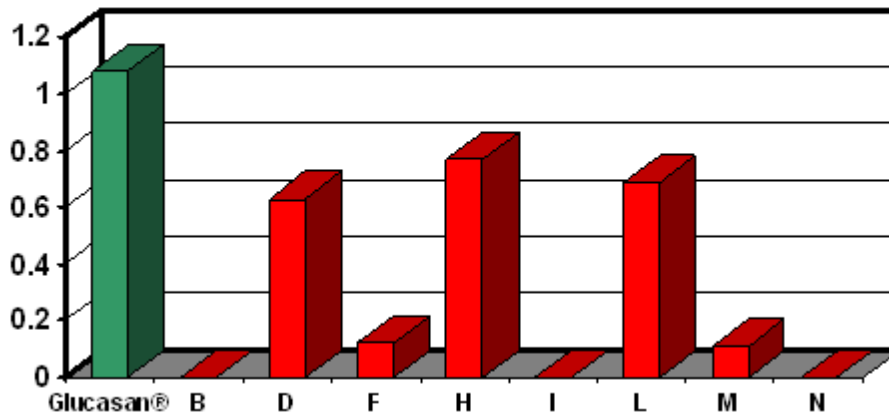
This study compares Glucasan® with 8 other comparable Beta-Glucan products that claim to 'strengthen immunity' and demonstrated a dramatic difference between them - here is an extract from the conclusion:

The Glucasan® Product produced the highest increases of radical formation in activated phagocytes (100%, left column below), followed by the Products D (84%), H (53%) and L (12%), whereas the activation rate of the other products was below 5%. Illustrated is radical formation and phagocytosis in human and porcine phagocytes (relative units).



The Graph below shows the influence of the various products on the synthesis of the chemokine interleukin-8. The Glucasan® Product exerted the strongest influence (100%), followed by Product H with 71%, Product L with 64%, Product D with 58%, and Product M with 10%. The remaining Products B, I and N did not produce any effect at all. Illustrated is the Interleukin-8 synthesis in phagocytes:

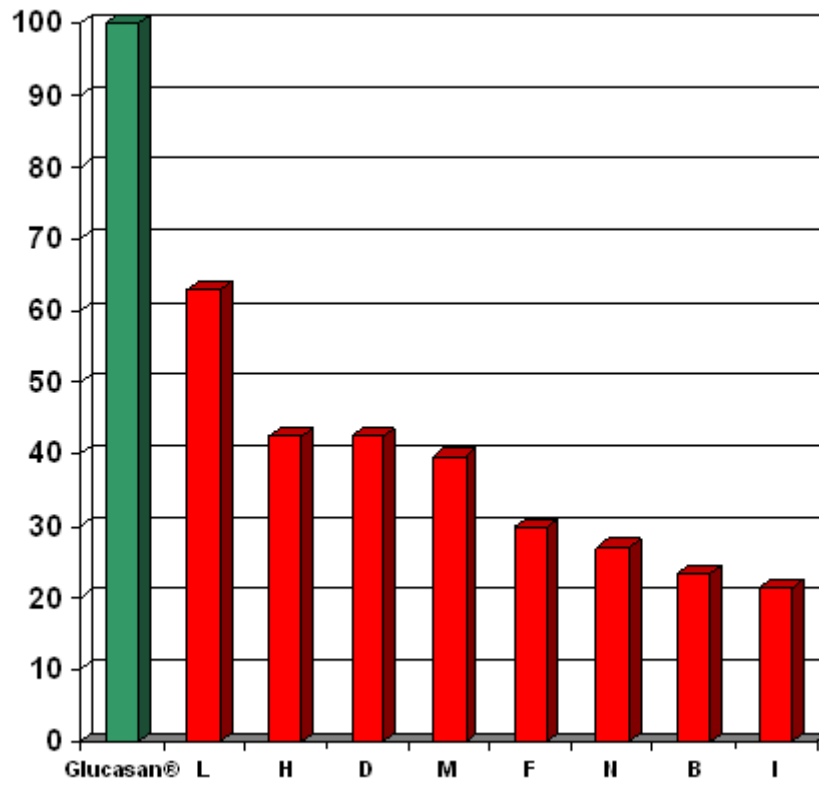
### Interleukin-8 (pg/ml cells)



Ranking positions of products of similar application according to the respective manufacturers (strengthening of the immune system, immunomodulation). The numerical values represent the mean values (Mean) of the ranking positions obtained for the potency of the respective products with regard to radical formation (RF), interleukin-8 synthesis (IL8), and neopterin synthesis (Neopterin).

| Product   | Mean | (RF,IL8,Neopterin) |
|-----------|------|--------------------|
| Glucasan® | 1.7  | (1,1,3)            |
| L         | 2.7  | (4,3,1)            |
| H         | 4.0  | (3,2,7)            |
| D         | 4.0  | (2,4,6)            |
| M         | 4.3  | (5,6,2)            |
| F         | 5.7  | (9,5,3)            |
| N         | 6.3  | (8,8,3)            |
| B         | 7.3  | (6,8,8)            |
| I         | 8.0  | (7,8,9)            |

The numerical values represent the inverse mean values (1/mean) of the ranking positions of each of the products, based on the potency elicited in radical formation, interleukin-8 synthesis, and neopterin synthesis (see Table above). Values are reported as percentages in the chart below.



Both the Table and Chart above show that the products can be allocated to three groups: the Glucasan® product and Product L lead in the rank list, the Products I, B and N are at the bottom, while Products H, D, M and F hold intermediate positions.