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'Tuftsin': a Natural Phagocytosis Stimulating Peptide

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WE have shown in this laboratory that a specific cell bound leucophilic γ -globulin fraction, leucokinin, is essential for maximal stimulation of the phagocytic activity of the blood neutrophilic leucocyte^{1,2}. We now report that the whole stimulatory effect of leucokinin can be ascribed to a single peptide fragment liberated by a specific enzyme in the outer membrane of the neutrophile. We shall refer to this peptide as 'tuftsin' (after Tufts University) and to the enzyme as leucokininase. The peptide 'tuftsin' has been produced *in vitro* from a γ -globulin fraction, PC IV, by treatment with leucokininase. PC IV is prepared by chromatography on phosphocellulose columns³ and contains all the leucokinin activity of serum γ -globulin².

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