Research Article

Chicken Soup Inhibits Neutrophil Chemotaxis In Vitro

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Full Published Study

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Chicken soup has long been regarded as a remedy for symptomatic upper respiratory tract infections. As it is likely that the clinical similarity of the diverse infectious processes that can result in “colds” is due to a shared inflammatory response, an effect of chicken soup in mitigating inflammation could account for its attested benefits.

To evaluate this, a traditional chicken soup was tested for its ability to inhibit neutrophil migration using the standard Boyden blindwell chemotaxis chamber assay with zymosan-activated serum and fMet-Leu-Phe as chemoattractants.

Chicken soup significantly inhibited neutrophil migration and did so in a concentration-dependent manner. The activity was present in a nonparticulate component of the chicken soup. All of the vegetables present in the soup and the chicken individually had inhibitory activity, although only the chicken lacked cytotoxic activity. Interestingly, the complete soup also lacked cytotoxic activity. Commercial soups varied greatly in their inhibitory activity.

The present study, therefore, suggests that chicken soup may contain a number of substances with beneficial medicinal activity. A mild anti-inflammatory effect could be one mechanism by which the soup could result in the mitigation of symptomatic upper respiratory tract infections.

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