4LIFE TRANSFER FACTOR AGEPRO® CLINICAL STUDY ON THE EFFECTS OF NATURAL KILLER CELL ACTIVITY ACROSS DIFFERENT AGE GROUPS

Technical White Paper

Kelsi Irvine, Dr. David Vollmer

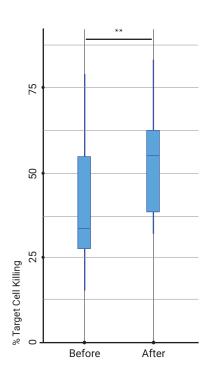
4Life Research, Sandy, Utah

OBJECTIVE

This clinical study investigated the effects of 4Life Transfer Factor AgePro on Natural Killer (NK) cells across different age groups.*

BACKGROUND

This study involved 17 individuals (9 women and 8 men). The participants ranged in age from 23 to 89 and consumed 4Life Transfer Factor AgePro twice a day for 30 days. The study measured the activity of NK cells through the killing of K562 human myeloid leukemia cells. The cells were observed with flow cytometry. The interaction between effector cells (e.g., peripheral blood mononuclear cells, PBMCs) and target cells (K562) was assessed in different experiments with different numbers of effector cells and target cells. NK cell activity was further evaluated by the release of perforin, cytokines, and chemokines, which are all connected to the body's immune system. Additionally, the expression of surface activation markers was analyzed to assess immune activation. Surface activation markers tell the immune system when something foreign in the body may be a threat.



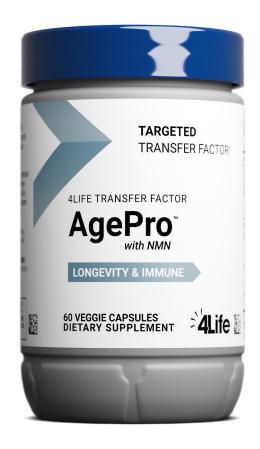
STUDY DESIGN

Increased NK Cell Activity:
4Life Transfer Factor AgePro
significantly enhanced NK cellmediated killing of K562 cells
and increased the expression of
activation markers.*

Cytokine and Chemokine Production: 4Life Transfer Factor AgePro led to increased production of cytokines and chemokines.*

No Spontaneous Activation:

Importantly, there was no increase in cytokine levels or activation markers in PBMCs cultured alone, indicating that 4Life Transfer Factor AgePro safely and selectively modulated immune activity in response to potential health threats.*



CONCLUSION

This clinical study resulted in a significant enhancement of NK cell cytotoxicity, demonstrating 4Life Transfer Factor AgePro's powerful effects on immune activity. The increase in NK cell activity, cytokine production, and activation of immune responses was only observed in the presence of harmful target cells, not in isolated PBMC cultures, which means 4Life Transfer Factor AgePro targets health threats. The findings were similar across different age groups.*