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Highlights

- Dibutyl phthalate (DBP) is a commonly used plasticizer with limited experimental data to reflect concerns for immune-modulating properties emerging from epidemiological studies.
- DBP dampened the release of inflammatory mediators TNFα and IFNγ, and altered the expression of surface markers in human granulocytes, in response to immune stimuli *in vitro*.
- The whole blood assay is a valuable model to study effects of environmental contaminants on inflammation and cellular immune function, but the current results merit further *in vitro* and *in vivo* investigations.

ABSTRACT

Background: Phthalates are plasticizers used in many common commercial products. They are ubiquitous environmental contaminants and epidemiological studies suggest that