

The Airways of “Healthy” Vapers are Abnormal!

Non-Smoker



Smoker



Vapers

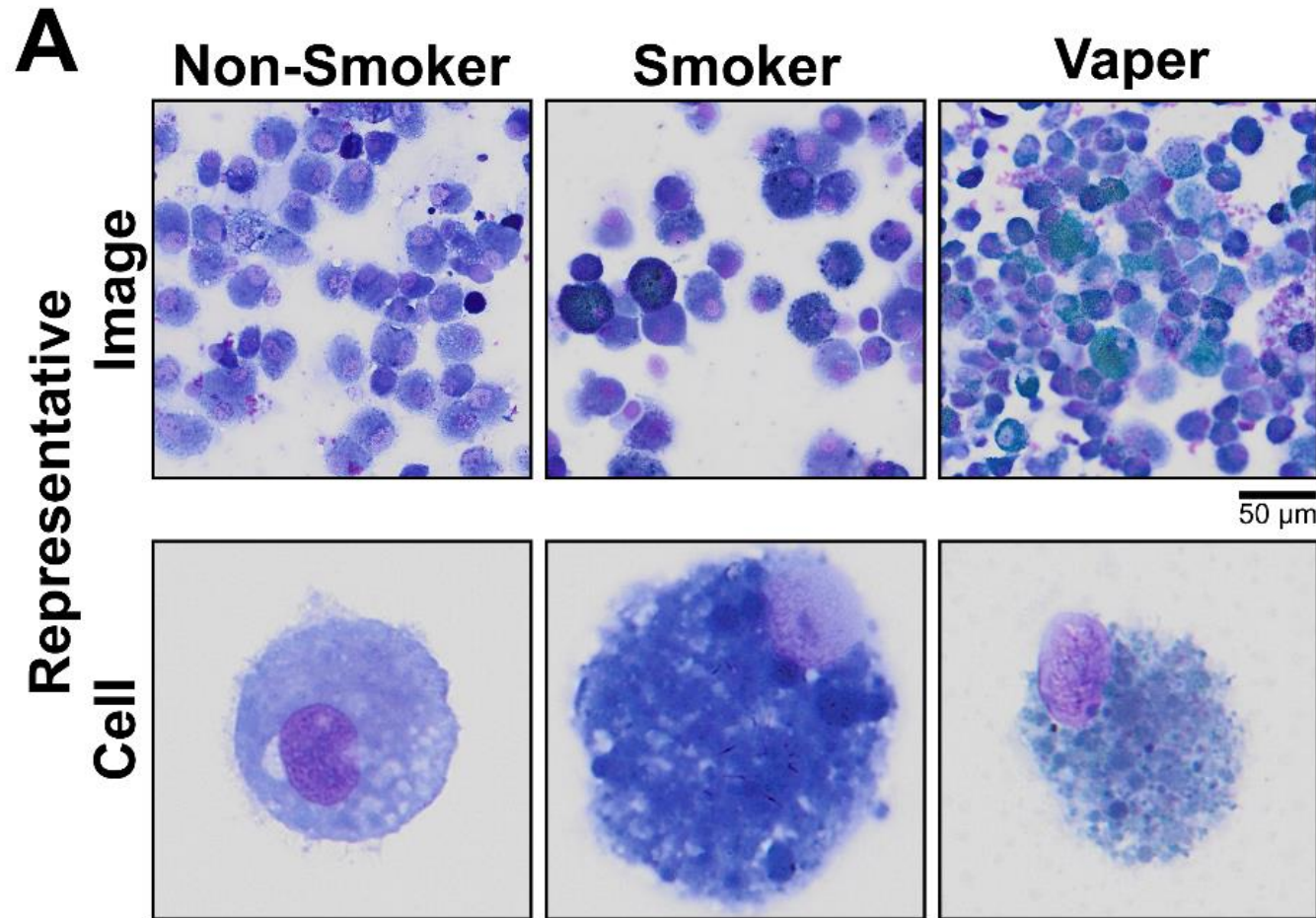


Reference:

Ghosh, A., Coakley, R. C., Mascenik, T., Rowell, T. R., Davis, E. S., Rogers, K., Webster, M. J., Dang, H., Herring, L. E., Sassano, M. F., Livraghi-Butrico, A., Van Buren, S. K., Graves, L. M., Herman, M. A., Randell, S. H., Alexis, N. E., & Tarran, R. (2018). Chronic E-Cigarette Exposure Alters the Human Bronchial Epithelial Proteome. *American Journal of Respiratory and Critical Care Medicine*, 198 (1), 67-76.

<https://www.atsjournals.org/doi/10.1164/rccm.201710-2033OC>

Vapers' Alveolar Macrophages Also Look Different



Reference:

Davis, E. S., Ghosh, A., Coakley, R. D., Wrennall, J. A., Lubamba, B. A., Rowell, T. R., Dang, H., Pawlak, E. A., Li, Q., Alexis, N. E., Riberio, C. M. P., & Tarran, R. (2021). Chronic E-Cigarette Exposure Alters Human Alveolar Macrophage Morphology and Gene Expression. *Nicotine & Tobacco Research*, 2021. <https://doi.org/10.1093/ntr/ntab186>