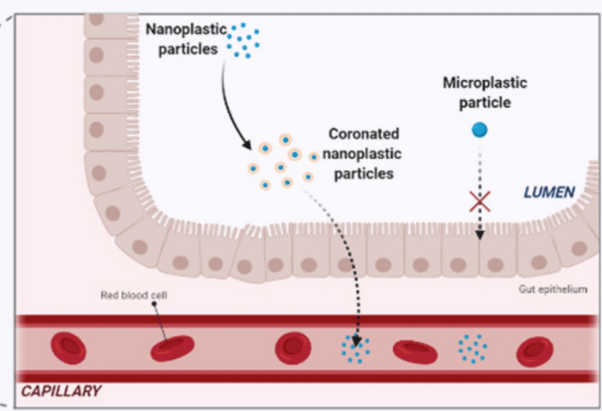
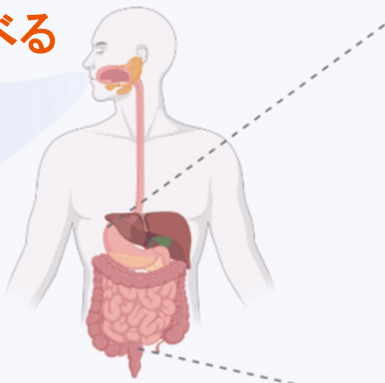


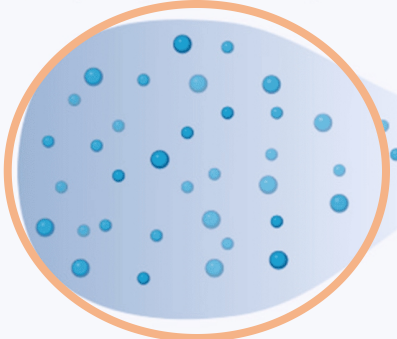


食べる

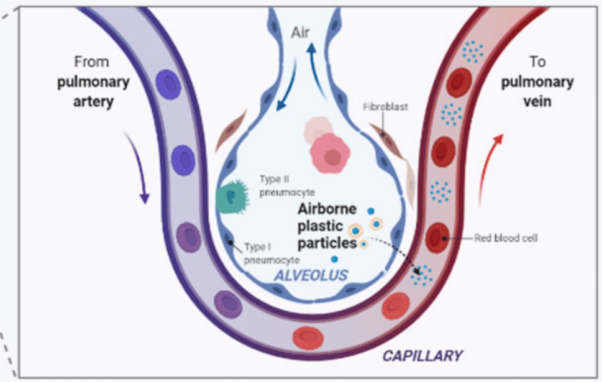
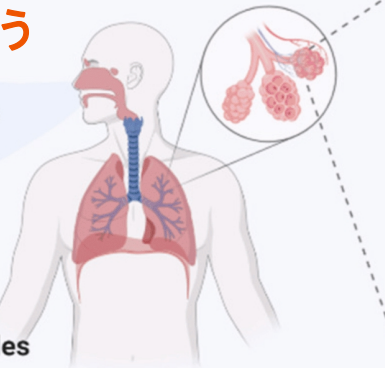


Ingestion of plastic particles

- From plastic particles-containing food
- From plastic particles-containing drinks



吸う



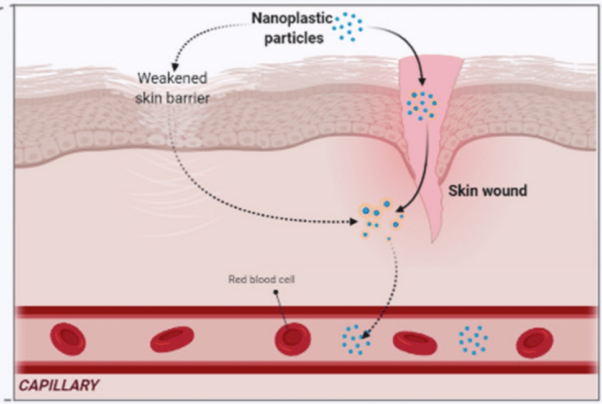
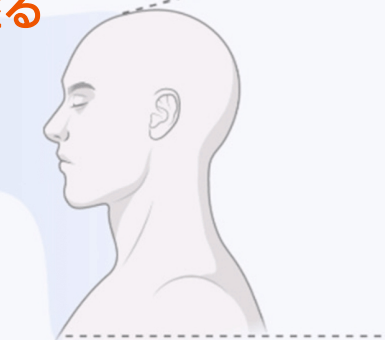
Inhalation of airborne plastic particles

- Indoor from synthetic textiles
- Outdoor from contaminated aerosol from ocean waves, airborne fertilizer particles from drief wastewater treatments, or atmospheric fallout

- Factors that affect the absorption of plastic particles in the lungs:
- Hydrophobicity
 - Surface charge
 - Surface functionalization
 - Surrounding protein coronas
 - Particle size



塗る



Skin contact of plastic particles

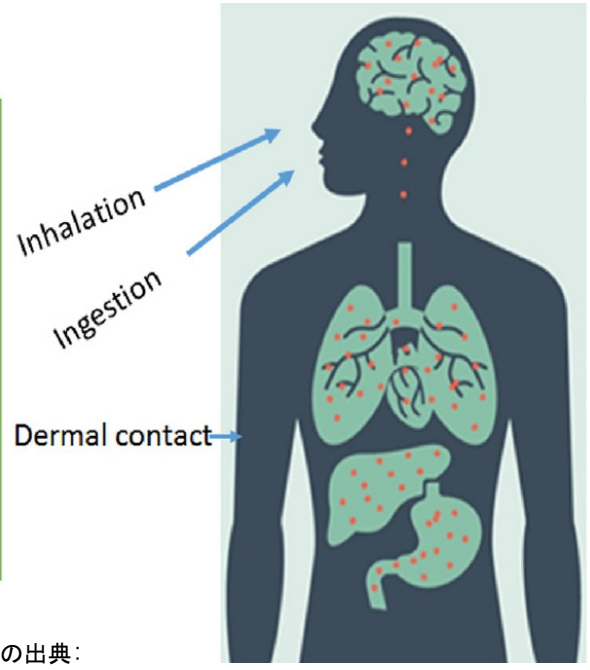
- From plastic particles-containing water
- From plastic particles-containing health and beauty products

(原図の出典: Nanomaterials 2021, 11(2), 496; <https://doi.org/10.3390/nano11020496>)

マイクロプラスチック・ナノプラスチックの脅威

食べ物にも、空気中にも、化粧品にも、どこにでも高濃度に存在するようになった微粒子のマイクロプラスチックやナノプラスチックは、複数の経路にて血中に入り、各組織に到達し、様々な健康被害を巻き起こしている。

Routes of exposure



Human health effects

- Gastrointestinal issues
- Endocrine disruption
- Respiratory problems
- Cardiovascular issues
- Skin irritation
- Allergic reaction

(原図の出典: DOI: <https://doi.org/10.1016/j.heliyon.2023.e20440>)



- 胃腸の問題**
内分泌かく乱
呼吸器系の問題
心血管系の問題
皮膚刺激
アレルギー反応

健康を保つためには、可能な限り、人工的なものから遠ざかるしかない。

<作成: stnv基礎医学研究室>