I shall discuss several classical isoperimetric inequalities (e.g., volume vs. surface area of the boundary, harmonic radius vs. volume radius, torsional rigidity of a domain vs. area) as corollaries of so-called “isoperimetric sandwiches” that involve seemingly unrelated function-theoretic and operator-theoretic quantities: analytic and harmonic contents (best approximations), norms of self-commutators of some simple subnormal operators, etc. I will illustrate this theme with few recent examples and then focus on several attractive open problems. (Received August 06, 2014)