A $(d - 1)$-dimensional simplicial complex is called balanced if its underlying graph admits a proper $d$-coloring. Such a coloring imposes additional combinatorial structure on the face numbers of a balanced simplicial complex. We will show that many classical enumeration results for simplicial manifolds have balanced analogues and present a balanced version of the Generalized Lower Bound Conjecture for simplicial polytopes. (Received August 31, 2014)