Digestive bloating is a very common disease, that, though tightly linked to other better known functional diseases such as functional dyspepsia and irritable intestine syndrome, often appears as isolated dysfunction itself. Patients refer episodes of abdominal pressure that are difficult to explain. Through the analysis of CT captures of the patients, using a series of measuring tools developed ad-hoc, we have obtained a better comprehension of these functional digestive diseases that have lead to a proper diagnosis and treatment of such patients. In this paper we present the tools that have been developed to assist physicians in obtaining measures of different morpho-volumetric parameters of the abdominal and pulmonary structures and how these are used in the clinical practice to effectively diagnosing digestive bloating.