**Purpose:** Cardiopulmonary exercise testing (CPET) is the gold standard for non-invasively measuring cardiorespiratory fitness and is popular in many fields. CPET analyzes expired gases, usually generating one data point per breath (breath-by-breath). Consequentially, this data requires processing before later analysis because respiratory variability is much higher than the underlying metabolism it reflects. There is no universal method to process breath-by-breath data, and previous research shows that different approaches can affect downstream results. Moreover, there is little research on the popularity of different data processing methods and how often they are described in peer-reviewed literature. This scoping review aims to document the popularity and prevalence of CPET data processing methods.

**Methods:** We followed current scoping review methodology and searched three databases for papers whose methods included CPET with gas exchange. We screened those results using regular expressions and machine learning to identify papers where authors collected gas data breath-by-breath. Using regular expressions, we documented which, if any, gas data processing procedures were described in the methods section regarding outlier removal, interpolation, and averaging methods.

**Results:** Of the 8420 articles analyzed, 377 (4.5%) and 583 (6.9%) described outlier removal and interpolation, respectively. An estimated 66.8 ± 2.8% reported averaging methods (*n* = 1078). When documented, the most popular outlier cutoffs are mean ± 3 or 4 SD (39.0% and 51.7%, respectively), and the dominating interpolation time frame and procedure were one second (94.0%) and linear interpolation (92.2%), respectively. When described, the most popular averaging methods are 30 (30.8%), 60 (12.4%), 15 (11.6%), 10 (11.0%), and 20 (8.1%) second bin averages.

**Conclusions:** Despite the known impact on later analyses, only two-thirds of studies using breath-by-breath data clearly documented their averaging methods.Few papers explicitly describe gas data processing regarding outlier removal and interpolation. The importance of data processing depends on the subsequent analysis, but better documentation can improve reproducibility and study comparisons.