

Final results on the measurement of charged pion, kaon and unidentified hadron multiplicities in semi-inclusive deep inelastic scattering at the COMPASS experiment at CERN are presented and discussed. Measurements are performed using data collected in 2006 by scattering a 160 GeV muon beam off an isoscalar target, and cover a wide kinematic range defined by $Q^2 > 1$ (GeV/c)², $0.1 < y < 0.7$ and $0.004 < x < 0.7$. Results are compared to existing measurements in the overlapping kinematic regions. Collinear fragmentation functions for pions and kaons are extracted from a leading order fit to COMPASS data, these data will also serve as inputs to global QCD fits.