Autism spectrum disorders (ASDs) are a group of complex neurodevelopmental disorders characterized by deficits in language and social skills. One factor that could plausibly contribute to language deficits in children with ASDs is an acoustic difference in the language input. When compared to adult-directed speech, speech directed to typically-developing children is characterized by higher average pitch, greater pitch range, rising final pitch, and shorter duration (Fernald et al., 1989; Garnica, 1974). Research suggests that the acoustic characteristics of child-directed speech promote word learning and grammar development in typically-developing children (Fernald & Mazzie, 1991; Thiessen, Hill, & Saffran, 2005; Kemler Nelson, Hirsch-Pasek, Jusczyk, & Wright Cassidy, 1989). However, there is a lack of information regarding the use and impact of child-directed speech for children with ASDs. In this study, five mothers of children with ASDs were videotaped in their homes during interactions with their children and the researcher. Five mothers of children matched in chronological age and three mothers of children matched in language ability to the children with ASDs were also videotaped. Child-directed speech and adult-directed speech were transcribed for each mother, and the acoustic features of both speech types were compared. Our results suggest that mothers modify their speech in similar ways to both children with ASDs and typically-developing controls. These results contribute to our understanding of the language environment for children with ASDs and have implications for the role of child-directed speech in language development.