Soybean storage for long periods leads to decreases in protein solubility affecting texture and sensory properties of tofu. Texture and sensory characteristics were investigated in tofu made from soybean Codetec 214 and BRS 267 cultivars, stored under three conditions: accelerated aging (AA, 84% RH, 30° C, 6 months), natural aging (NA, 68.8% RH, 20.7° C, 18 months) and control (C, 47% RH, -20° C). Texture profile was evaluated in texturometer (TA-XT2i), sensory profile by Quantitative Descriptive Analysis (QDA) with non-structured scales (9cm) and 13 trained panelists. A sensory acceptance test was applied for 110 habitual consumers and a 10 points hedonic scale. The data were analyzed by ANOVA, Tukey test and Principal Component Analysis. Both cultivars showed a decrease in hardness (4.70 to 2.06 N), gummine (3.65 to 1.80), elasticity (0.90 to 0.65) and fracturability (0.042 to 0.027 N) and an increase in adhesiveness (-0.29 to -0.05 N.s) in tofus during aging of soybean. On the sensory profile, the tofus were divided into three groups, C with more intensity (>7.0) of color uniformity, brightness, agglomerated appearance, sweet aroma and taste, hardness and elasticity; AA was characterized by gray color, roughness, fermented aroma, bitter taste, astringency, rancidity and fermented, fracturability and residual adhesiveness (intensity >6.5); and NA with intermediate intensity for all attributes. The acceptance was greater for C (7.8 - 8.4), followed by NA (5.3 - 6.0) and AA (3.8 - 4.4).