A complex comparison of biological properties of following representative strains of *Listeria monocytogenes* of different serotypes was performed: (1) strain designated Brat 1 (serotype 1); (2) strain “Welshimer”, originally isolated by this author from plants. Strain Bratislava 1 can be considered representative of the species possessing typical biological properties, producing toxic substance, particularly haemolysin, NAD-ase and phospholipase. The strain has a medium virulence in mice. The strain Welshimer possesses biological properties similar to those of so called F-strains of *Listeria monocytogenes* (Welshimer, Stuart), produces no haemolysins but possesses lipolytic activity. This strain is avirulent in adult mice. Depending on the size of inoculum, this strain is capable of a short-term (7—12 days) persistence in the infected organism while eliciting a minimal reaction (mixed nodes in the liver and spleen). Both strains possess the previously described endotoxin-like factor E₁ (Patočka, Mára) and they are immunogenic.