[CLAIMS]

What is claimed is:

[Claim 1]

A toothbrush comprising:

a handle body that includes a head portion, a neck portion that extends from the head portion, and a handle portion that extends from the neck portion,

wherein bristle bundles are implanted on a bristle implanted surface of the head portion by the metal piece-scheme bristle implanting,

a material of the handle body is polypropylene resin,

a thickness of the head portion is 2.0 to 4.0 mm,

when an amount of deflection of the head portion which is measured by a method (α) described below is assumed to be A, and an amount of deflection of the neck portion which is measured by a method (β) described below is assumed to be B,

a value X of an amount of deflection (A/L2) of the head portion per length L2 (mm) of the head portion is 0.015 to 0.045, and

a ratio Y/X is 0.8 to 2.0 which is a ratio of a value Y of an amount of deflection (B/(L2 + L3)) of the neck portion per a sum of a length L2 (mm) of the head portion and a length L3 (mm) of the neck portion relative to the value X;

Method (α): a height of a tip end of the handle body in a state in which the bristle implanted surface of the head portion is directed upward in the vertical direction and a position of a boundary between the head portion and the neck portion is fixed is assumed to be a reference height, a 200 g spindle is further suspended at a position corresponding to 10 ± 3% from a tip end of the bristle implanted portion relative to a length in a longer axis direction of the bristle implanted portion at the head portion in the fixed state, and an

amount of displacement (a unit is mm) of the height from the reference height of the tip end of the handle body 10 seconds later is assumed to be the amount of deflection A of the head portion; and

Method (β): the height of the tip end of the handle body in a state in which the bristle implanted surface of the head portion is directed upward in the vertical direction and the position of the boundary between the neck portion and the handle portion is fixed is assumed to be a reference height, a 200 g spindle is further suspended at a position corresponding to 50 ± 3% from the tip end of the bristle implanted portion relative to the length in the longer axis direction of the bristle implanted portion at the head portion in the fixed state, and the amount of displacement (the unit is mm) of the height from the reference height of the tip end of the handle body 10 seconds later is assumed to be the amount of deflection B of the neck portion.

[Claim 2]

A toothbrush comprising:

a handle body that includes a head portion, a neck portion that extends from the head portion, and a handle portion that extends from the neck portion,

wherein bristle bundles are implanted on a bristle implanted surface of the head portion by the metal piece-scheme bristle implanting,

a material of the handle body is polyacetal resin,

a thickness of the head portion is 2.0 to 4.0 mm,

when an amount of deflection of the head portion which is measured by a method (α) described below is assumed to be A, and an amount of deflection of the neck portion which is measured by a method (β) described below is assumed to be B,

a value X of an amount of deflection (A/L2) of the head portion per length L2

(mm) of the head portion is 0.027 to 0.032, and

a ratio Y/X is 1.0 to 1.4 which is a ratio of a value Y of an amount of deflection (B/(L2 + L3)) of the neck portion per a sum of a length L2 (mm) of the head portion and a length L3 (mm) of the neck portion relative to the value X;

Method (α): a height of a tip end of the handle body in a state in which the bristle implanted surface of the head portion is directed upward in the vertical direction and a position of a boundary between the head portion and the neck portion is fixed is assumed to be a reference height, a 200 g spindle is further suspended at a position corresponding to 10 ± 3% from a tip end of the bristle implanted portion relative to a length in a longer axis direction of the bristle implanted portion at the head portion in the fixed state, and an amount of displacement (a unit is mm) of the height from the reference height of the tip end of the handle body 10 seconds later is assumed to be the amount of deflection A of the head portion; and

Method (β): the height of the tip end of the handle body in a state in which the bristle implanted surface of the head portion is directed upward in the vertical direction and the position of the boundary between the neck portion and the handle portion is fixed is assumed to be a reference height, a 200 g spindle is further suspended at a position corresponding to 50 ± 3% from the tip end of the bristle implanted portion relative to the length in the longer axis direction of the bristle implanted portion at the head portion in the fixed state, and the amount of displacement (the unit is mm) of the height from the reference height of the tip end of the handle body 10 seconds later is assumed to be the amount of deflection B of the neck portion.

[Claim 3]

The toothbrush according to claim 1 or 2,

wherein a width at a position where a width is the smallest in the neck portion is 3.0 to 4.5 mm.

[Claim 4]

The toothbrush according to claim 3,

wherein a thickness at a position where a thickness is the smallest in the neck portion is 3.0 to 4.5 mm.