Retention is the final phase of active orthodontic treatment where teeth are maintained in a healthy, functional, and esthetic position.

The method of retention to be employed is best selected at the outset of treatment and incorporated in the treatment plan for each individual case.
General Factors affecting stability

Among the many suggested factors mentioned that influence stability, three deserve further elaboration:

(i) the involvement of the periodontal ligament fibers and gingival fibers

(ii) late mandibular growth and,

(iii) physiologic imbalance of local extrinsic forces acting on the corrected dentition.

periodontal ligament fibers and gingival fibers

- unorganized gingival and PDL fibers lead to an increased susceptibility to tooth movement
- restoration and reorganization of arrangement of the PDL fibers and calcification of the lamina dura takes 3 to 4 months
- collagenous fibers reorganize structurally in 4 to 6 months
- supracrestal elastic fibers of the gingiva take up to 1 year to structurally adapt to the new position of the teeth
- rotational relapse might be caused by the elastic fibers of the gingival tissue
- fiberotomy
- Life time retention
late mandibular growth

Remodeling of the craniofacial skeletal and soft tissue structures continuous into adult life, leading to changes in dental alignment

physiologic imbalance of local extrinsic forces

- occlusion
- tongue musculature
- cheek musculature
- gingival fibers
- fibers of the PDL

the “rebound effect”
Retention of Anterioposterior Corrections

- Retention of Class II Corrections

- Retention of Class III Corrections
Retention of Class II Corrections

Retention of Vertical Corrections

- Retention after Deep Bite Corrections
- Retention after Anterior Open Bite Corrections
Retention after Deep Bite Corrections

UPPER HAWLEY TYPE RETAINER WITH ANTERIOR BITE PLANE
PASSIVE ANTERIOR BITE PLANE

Retention after Anterior Open Bite Corrections

TONQUE CRIB

POSTERIOR BITE BLOCK
Retention of Arch Form and Arch Alignment

Effects of Extraction and Non extraction Treatment on Arch Stability

- intermolar width
- Intercanine width
- interpmolar width
- dental arch length
- dental arch form
- mandibular incisors

Palatal Expansion and Stability

Minimum time of Retention

3 to 6 months
Third Molars and Relapse

Extraction of third molars for the purpose of preventing lower incisor relapse is not justified

Appliances designs and Retention
HAWLEY TYPE REMOVABLE RETAINERS

WITH ARROW CLASPS

WITH ADAMS CLASPS

LOWER HAWLEY TYPE RETAINERS

WITH BALL CLASPS

WITH MOLAR RESTS AND CANINE ATTACHMENTS
WRAP-AROUND RETAINER

AVOIDS OCCLUSAL INTERFERENCE

RETAINER WITH PONTIC
BONDED RETAINERS

BONDED RETAINER-SPACE MAINTAINER

HAWLEY TYPE RETAINERS WITH FINGER SPRINGS FOR LATERAL INCISORS
HAWELEY TYPE RETAINERS WITH FINGER SPRINGS FOR LATERAL INCISORS

MODIFIED HAWELEY TYPE RETAINER FOLLOWING EXTRACTION OF FIRST PREMOLARS
MODIFIED HAWLEY TYPE RETAINER
FOLLOWING EXTRACTION OF FIRST PREMOLARS

Adams clasp
“L” clasp
“C” clasp
Long modified Adams clasp
Eye clasp
Modified Adams clasps
Modified lingual clasp
Ball clasp
POSITIONER