

## ADVANTAGES AND DISADVANTAGES AN ORAL IRRIGATORS

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**Introduction.** Even the most up-to-date and expensive toothbrush can not completely deprive the mouth and teeth from plaque and food debris that remain after careful mouthwash. Devices called irrigators, devoid of the above disadvantages and today more and more are used not only in dentistry, but also in home. More and more people every year recognize the need to have this device at home.

It uses a stream of pulsating water to remove the plaque and food debris between the teeth as well as below the gum line. The oral irrigator improves gingival health. The devices can also provide easier cleaning for braces and dental implants.

Thus, the use of irrigators is very important for the prophylactics and treatment of various dental diseases.

**Aim.** Analyze the main advantages and disadvantages of existing irrigators.

**Results and discussion.** Irrigators are divided into portable and stationary. Advantages of stationary irrigators, which connect to a home electrical grids:

- has a high power;
- the possibility of pressure regulation;
- do not need to charge the battery;
- usual in the complete they come together with different tips;
- easy to disassemble and wash.

Disadvantages of stationary irrigators: inconvenient to take in the traveling ,during working created noise and vibration. Advantages of portable irrigators that work from the battery: convenient to carry, because they have a small weight and compactness, not needed electrical grids for use.

Disadvantages of portable irrigators:

- the need for frequent replacement of batteries (accumulators) or recharging;
- more often fail, as they are made of light and not quite solid substances;
- has a small supply of water in the reservoir (may not be enough for one thorough cleansing of the entire oral cavity).

**Conclusions.** The use of irrigator for oral cavity is twice as effective as toothpaste and toothbrushes: up to 70% of plaque is cleared. As well as, the irrigator cleans gums, at the same time massaging them and improves blood circulation. Also, the irrigator is a good prophylaxis of such diseases of the gums and teeth as caries, periodontitis, gingivitis, etc.

## INTERNATIONAL CLASSIFICATION SYSTEMS FOR COSMETIC INGREDIENTS

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**Introduction.** At different times in different countries, they tried to systematize and catalog the plant and chemicals substance used for the manufacture of cosmetics means and drugs. Afterwards such catalogs began to have international status.

Many economically developed countries in the world, such as the USA, Australia, Canada, Japan and the countries of the European Union are requiring for manufacturers of cosmetic ingredients to register all new ingredients in such systems.

Today there are various international systems and catalogs of ingredients depending on their scope.

In the cosmetic industry accepted describe the ingredients according to the INCI and CAS system. Means that will not have a description of the composition in accordance with the international nomenclature will not be allowed to be selling in the countries that have accepted these classifications.

**Aim.** The aim of our work is to study the structure and features of the use of international classifications of cosmetic ingredients, namely INCI and CAS.

**Materials and methods.** A review of the scientific literature, using the descriptonal, searching and logical methods.

**Results and discussion.** The most common classification that has the most complete list of substances called the International Nomenclature of Cosmetic Ingredients system (INCI).

The INCI system was established in the early 1970's by the Personal Care Products Council (former CTFA – Cosmetic, Toiletry, and Fragrance Association). Currently, the list INCI registered more than 17,000 ingredients.

The names of substances according to this classification are indicated in English, and dyes and pigments in combination with Latin letters and numbers.

For example, titanium dioxide can be a common component, as well as a «white pigment». As an ingredient in the INCI system, titanium dioxide is indicated as «titanium diox», and as dye CI 77891.

The CAS system is a classification of chemicals substances developed by the subdivision of the American Chemical Society (Washington, USA). CAS is the only organization in the world whose main task is to find, collect and systematize all published information about chemicals substances.

Coding system CAS has authority in the chemical industry and is a kind of international code which allows the identification of chemical substance. Ingredients according to this classification are indicated in the form of a code that consists of numbers. For example, titanium dioxide according to the CAS classification is indicated as 13463-67-7.

In order to properly read the composition of cosmetic means, with the help of international classifications, it is necessary to know a several rules:

- name of ingredients in the composition means indicate in accordance with the international nomenclature of cosmetic ingredients (currently the most common is the INCI system);
- components are listed in decreasing order of their concentration. When listing ingredients whose concentration is less than 1.0%, this rule may not be followed;
- dyes, pigments and fragrance are indicated at the end of the list in the form of numbers or codes of the corresponding system;
- the symbol "+/-" indicates that the cosmetic means may contain all of the listed ingredients, for example: [+/- CI15510, CI14720, CI14815];
- herbal ingredients (extracts, juices, powders, oils, etc.). As a rule, are indicated in accordance with the international botanical nomenclature in the following way: The Latin botanical name of the plant, sometimes given the generally common name, followed by the name of the part of the plant from whom get the raw materials (for example, flowers, fruits, bark, etc.) and the method of processing the raw materials (for example, extract, oil, powder, etc.)

**Conclusions.** The INCI and CAS cosmetic ingredients classification systems are an integral part of the labelling of modern cosmetics means. Thanks to generally conventional rules for labelling the composition, each consumer can choose for himself a safe and qualitative cosmetic means based on their own requirements.

## ADVANTAGES OF SPHYGMOMANOMETER WS-1011 (NISSEI, JAPAN)

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**Introduction.** A sphygmomanometer is a necessary device for many people, especially for patients with hypertension. Daily independent blood pressure control warns serious pathologies and is the irreplaceable instrument of diagnostics for a doctor.