PRINTER FOR CONDITION-OPTIMIZING FOOD SUPPLEMENTS IN VEHICLES

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Technical task:
Food supplements are available on the open market and often consist of powders in capsules. The substances can have a positive influence on the driver’s condition. Food printers are already under development. So far, such substances are not available in the vehicle.

Initial situation:
Food supplements use the power of natural nutrients to optimize conditions. For example, it is known that guarana has a similar effect to caffeine and serves for activation. Substances in melon and other fruits serve the cell renewal, prevention of cell aging, support of relaxation and much more.

Solution:
A printer in the sense of a food printer is integrated into the vehicle. The food printer is filled with raw materials for the production of a capsule. The capsules can be filled with condition-optimizing substances via the printer. These are suggested by the vehicle depending on the situation, printed and offered to the driver. In this way, the printer could print capsules that activate when the driver has to drive further distances. If the driver wants to relax during automated driving, relaxation capsules can be printed. Thanks to the flexible composition of the substances in the capsule, individual aspects can be taken into account. For example, this could concern allergies or personal preferences regarding the proportion of natural and synthetic substances.

Technical implementation:
- Integration of the printer, e.g. in the center console or glove compartment.
- The printer is connected to the vehicle main unit so that the adaptive information about context, journey duration, etc. can be processed.
- An MMI input or interaction with the digital assistant can be used to either driver-initiated (i.e. the driver asks for it) or system-initiated (i.e. the system suggests) the pressure of a specific capsule.
- The capsule is handed over to the driver via an output tray in the driver’s grab area.

Advantages:
- Production of fresh capsules - adapted to the user and the situation - and thus an effective condition optimization of the passengers becomes possible.