

**LOCAL HEALTH COMPANY 3 LIGURIA (ASL3) INTRODUCES
THE GLU GLU TEST FOR ALCOHOL USE DISORDER
IDENTIFICATION (ALCOHOL USE DISORDER
IDENTIFICATION TEST)**

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27 The International Classification of Diseases 11th Edition (ICD-11) published in May 2019 reports
28 that for 200 different diseases alcohol consumption is an avoidable risk. These include
29 neuropsychiatric disorders, chronic pathologies, neoplasms and accidents with permanent disability.
30 Furthermore, alcohol consumption accounts for 5.9% of all deaths and 5.1% of the global burden
31 disease. Among people aged 15-64 years, 1 death out of 7 in men and 1 death out of 13 in women,
32 are related to alcohol consumption.

33 Alcohol-related liver disease is one of the 30 most frequent causes of death in the world and
34 mortality due to this condition is closely associated to alcohol consumption.

35 It is also estimated that 8.2 million people consume alcohol in a risky way in Italy.

36 In real practice severe alcohol use disorders (AUDs), like alcohol dependence, are identified in only
37 10-15% of cases. The mild-to-moderate forms are usually not taken into consideration; if this is
38 done the risk is often underestimated.¹

39 This involves the appearance and worsening of psycho-physical pathologies and a significant
40 increase in health costs.

41 The alcohol use disorders identification test (AUDIT) has long been proposed for the early
42 identification of AUDs.

43 This tool can and must be used by all health professionals and social health workers, especially in
44 primary care settings.

45 It is, therefore, appropriate to identify the consumption of alcohol in clinical practice using simple
46 and validated tests. CAGE (Cut-down, Annoyance, Guilty, Eye-opener) and AUDIT (Alcohol Use
47 Disorders Identification Test) are among the best known ones.² However, CAGE does not perform
48 well at highlighting drinkers who consume risky amounts of alcohol but who are not dependent.
49 Thus, CAGE can be used at a later stage as an in-depth study of suspected alcohol dependence.

50 In light of this, we recommend paying more attention to alcohol consumption by using AUDIT. The
51 test's sensitivity and specificity (92% and 93%, respectively) are very high, this fact allows
52 identifying patients affected by hazardous or harmful consumption who are not alcohol addicted.
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AUDIT consists of ten questions. Each question provides a response mode on a 5-point scale: each response has a value from 0 to 4 points. If the score is equal to or less than 7 points, consumption is low risk; if it is between 8 and 15 points, consumption is risky; if it is between 16 and 19 points, consumption is harmful; if it is equal to or higher than 19 points, there is an addiction. Each of these phases must be addressed differently.

By risky consumption, we mean a level of consumption or a way of drinking that can cause damage in cases where these habits persist (men: 21-60 g / day; women: 11-40 g / day). By harmful consumption, we mean a diet that involves both physical and psychological damage (men > 60 g / day, women > 40 g / day and binge drinking. By binge drinking, we mean five or more units of alcohol in two hours for men and four units or more of alcohol in two hours for women).

In cases of risky and harmful consumption, the short intervention can be used.

In cases of dependence, the path followed must be customized and specialized in Specific Centers with specific environmental characteristics.

The brief intervention is a particular application of motivational counseling for people who indulge in risky or harmful consumption in order to make them aware of the reasons for a change.²

Today, consumption is measured using AUDIT in only 10% of patients, and brief intervention is used for less than 5% of patients.³

For this reason, the local health company 3 Liguria (ASL3) has decided to make the AUDIT available on the institutional website (<https://www.asl3.liguria.it/>) calling it GLU GLU Test. Some test questions have been remodeled using simpler language for the general population.

At the end of the compilation of the test, the calculator provides the citizen with his score and, in relation to his possible risk band, provides him with the appropriate advice.

The test is completely anonymous and gives people the opportunity to independently reflect on their drinking and become aware of a risky or harmful relationship with alcoholic beverages.

It is currently the first attempt to administer this test to a large area of the population for the early identification of AUDs.

The identification of AUDs in the general population may decrease the risk of numerous psychophysical pathologies.⁴ Recently, in fact, Kuitunen and Roerecke⁴ found that AUDIT screening score is associated with mortality risk.

In the medium to long term, an assessment will be made to verify the real impact of this initiative in a metropolitan area

References

- 1) Testino G, Fagoonee S, Caputo F, Pellicano R. The early identification of alcohol use disorders and liver injury: proposal for a diagnostic algorithm. *Panminerva Med* 2021; 63: 361-7
- 2) Testino G., Leone S., Pellicano R. Atrial fibrillation and alcoholic beverages. *Minerva Med* 2019; 110: 471-2
- 3) Testino G, Pellicano R. Alcohol consumption in the Covid-19 era. *Minerva Gastroenterol Dietol* 2020; 66: 90-2
- 4) Testino G, Bottaro LC, Patussi V, Scafato E, Addolorato G, Leone S et al. Addiction disorders: a need for change. Proposal for a new management. Position paper of SIA, Italian Society on Alcohol. *Minerva Med* 2018; 109:369-385
- 5) Moehring A, Rumpf HJ, Hapke U, Bischof G, John U. Diagnostic performance of the alcohol use disorders identification test (AUDIT) in detecting DSM-5 alcohol use disorders in the General population. *Drug and Alcohol Dependence* 2019; 204: 107530

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2 ***Authors contribution Section***
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4 *Conflicts of interest.* The author certifies that there is no conflict of interest with any financial
5 organization regarding the material discussed in the manuscript.
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7 *Authors contributions.*

8 Patrizia Balbinot, Luigi Carlo Bottaro e Gianni Testino have given substantial contributions to the
9 conception or the design of the manuscript, Gianni Testino and Patrizia Balbinot to acquisition,
10 analysis and interpretation of the data. All authors have participated to drafting the manuscript,
11 Rinaldo Pellicano revised it critically.
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13 All authors read and approved the final version of the manuscript.
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