

Skin Analysis Techniques

Skin Analysis Techniques – Quick Reference Notes

1. Why Perform a Skin Analysis?

Goal	Benefit
Identify skin type & condition	Tailor product and treatment recommendations
Detect early signs of damage or disease	Prevent worsening and guide interventions
Monitor progress over time	Measure efficacy of regimens & procedures
Educate the client/patient	Improves compliance and self-care

2. Core Classification Systems

System	Primary Parameters	Typical Categories
Skin Type (classic)	Sebum production, moisture, pore size	Normal, Oily, Dry, Combination, Sensitive
Skin Condition	Barrier integrity, pigmentation, elasticity, lesions	Healthy, Dehydrated, Hyperpigmented, Acne-prone, Photoaged, Rosacea, Eczema, etc.
Dermatologic Grading Scales	Severity of specific disorders (e.g., acne, melasma)	Glogau (photoaging), Fitzpatrick (UV response), Global Acne Grading System (GAGS)

3. Visual (Qualitative) Examination

Step	What to Observe	Tools / Tips
1. Cleanse & acclimatize	Remove makeup, allow 15-30min for skin to settle	Gentle cleanser, neutral temperature room (20-22°C)
2. Overall appearance	Color, texture, sheen, presence of lesions	Good lighting (5500K daylight), magnifying mirror (10x)
3. Oil & shine	T-zone vs. cheeks, flashback after blotting	Blotting paper (standardized weight)

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Step	What to Observe	Tools / Tips
4. Pore visibility	Size, density, clustering	10× magnifier
5. Fine lines & wrinkles	Depth, distribution	10×?20× magnifier, side?lighting
6. Pigmentation	Freckles, lentigines, melasma, post-inflammatory hyperpigmentation	Wood's lamp (UV?365?nm) for depth
7. Vascular signs	Redness, telangiectasia	Polarized light, dermatoscope
8. Lesion assessment	Type (comedones, papules, pustules), distribution	Standard acne grading chart

4. Instrumental (Quantitative) Techniques

Technique	Principle	Measured Parameter	Typical Device	Clinical Use
Corneometry	Electrical capacitance of stratum corneum	Skin hydration (μA)	Corneometer	Assess barrier function, monitor moisturizers
Sebumetry	Lipid extraction & reflectance	Sebum excretion rate ($\mu\text{g}/\text{cm}^2$)	Sebumeter	Oily?skin evaluation, treatment efficacy
Cutometry	Negative pressure suction ? skin deformation	Elasticity, firmness (R0, R2)	Cutometer	Anti?aging, post?procedure recovery
Tewametry	Water vapor flux through skin	Transepidermal water loss (TEWL)	Tewameter	Barrier integrity, irritant testing
Spectrophotometry / Colorimetry	Light absorption/reflection	Pigmentation, erythema indices	Spectrophotometer, Mexameter	Melasma, rosacea monitoring

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Technique	Principle	Measured Parameter	Typical Device	Clinical Use
Ultrasound (High frequency)	Echoes from dermal layers	Dermal thickness, edema	20-50MHz probe	Photoaging, scar